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ABSTRACT

The current labor market for higher education graduates in the United Kingdom may be characterized as diverse and fragmented. Many graduates are recruited for the following positions: fast track management training programs; professional and functional careers; "graduate level" administrative and management jobs; and self-employment. In 1999, more than 250,000 individuals graduated with a first degree and 115,000 additional individuals graduated with a subdegree or postgraduate qualifications. The introduction of new two-year "foundation" degree is expected to boost those numbers in the future. As the number of "traditional" graduate jobs (managers, professionals) has failed to grow in line with graduate supply, more graduates have entered intermediate-level jobs (technicians, associate professionals) or lower-level jobs. In late 1999, half of all recruiters had held onto at least 95% of their 1998 intake and 72% of their 1996 intake. Although they have been largely beneficial to jobseekers, degrees and equivalent qualifications have not been passports to good jobs. Employability skills (including career management and self-presentation skills) are also needed to ensure effective transition into the United Kingdom's labor market, which will likely see further fragmentation in the future. (Thirty-three figures are included. Contains 54 references.) (MN)

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The IES Annual Graduate Review 2000: a diverse and fragmented market

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Executive Summary

At the start of the century, the labour market for graduates can be characterised by two words: 'diversity' and 'fragmentation'. Despite the strength of the economy, recruitment difficulties for graduates among the major recruiters eased in 1999, as vacancy levels fell. Vacancy levels, however, are expected to recover in 2000 and the need for graduate and high level skills has not gone away. Competition for the relatively small number of the best graduates will remain intense, despite the large numbers graduating. Many graduates will, however, have to set lower horizons in terms of the jobs and careers they seek and can enter.

Demand for good graduates

Competition, technology and rising consumer power are changing the way we work, the skills and jobs needed, and where they are located. Traditional boundaries are fast disappearing as companies move into new activities and markets, such as internet banking and retailing, or enter cross-border and cross-sector alliances, and seek to resource operations internationally. As a result, the staffing profile sought is shifting to higher level occupations and higher skill profiles within occupations. While a small number of graduates are being sought to fill 'high flier' development schemes, many are being sought for, or entering, an increasingly diverse range of jobs, in terms of entry to:

- fast track management training schemes: for small numbers in large organisations. Personal skills are critical, the supply limited and competition intense.
- professional and functional careers: *eg* accountancy and engineering. A growth area; personal qualities are growing in importance, the supply of suitable candidates is limited for some functions. Recruitment may focus on key technical courses.
- 'graduate level' administrative and management jobs: with more limited initial career prospects. Personal qualities are more important than qualifications. Graduates may be recruited alongside non-graduates, internal and experienced candidates.

- self-employment: where the rewards may be uncertain but lifestyle is more important. A traditional area for arts and design graduates.
- lower level jobs: where graduates can 'add value', upgrading the contribution to the job. They may be in competition, and work alongside non-graduates, finding jobs within the broader recruitment market.
- the wider labour market: in competition with non-graduates, where there may be little advantage in being a graduate.

Despite recurrent recruitment difficulties, the major recruiters have not markedly raised graduate starting salaries. While a few paid in excess of £25,000 in 1999, many jobs are jobs advertised at £10-12,000 per annum. Changes to the median starting salary (£17,500 in 1999) largely track the rise in national earnings.

Diversity among graduate job seekers

In the forty years since Robbins, numbers graduating have grown ten-fold. In 1999, over 250,000 graduated with a first degree and 115,000 more with sub-degree or postgraduate qualifications. The introduction of new two year 'foundation' degrees is expected to boost numbers further in future years. The graduate supply is now far more diverse:

- one in three young people enter higher education
- employability is important in choice of course
- two-thirds are still from the 'top' two social classes
- one in three enter with non 'A' level qualifications
- they study at over 250 universities and colleges
- women are now a majority of those graduating
- one in three are over 25 when they graduate
- one in seven come from ethnic minorities
- many now study near home and may be less mobile
- growing numbers will graduate with sub-degree qualifications
- they have diverse aspirations and expectations.

Finding the 'right' job

As the number of 'traditional' graduate jobs (managers and professionals) has failed to grow in line with graduate supply, so more graduates have entered intermediate level jobs as technicians and associate professionals, or lower-level jobs. Many are also taking two or more years to settle into 'stable' employment, with one in three entering temporary or fixed-term jobs.

There have always been big differences experienced by those from different disciplines. Those from the humanities, languages and biological sciences have the highest initial unemployment and the lowest proportions entering 'graduate' jobs. In contrast, those from computer science, engineering, education and medicine have the best employment profiles. Most find what they regard as satisfactory employment within two or three years of graduation: under eight per cent of 1999 graduates were unemployed six months after graduation.

Retention remains good

Retaining good graduates is influenced by a wide range of organisational and personal factors, including initial selection by both recruiter and recruit, the variety and challenge of work undertaken, and career prospects. Despite intense competition for the 'best', relatively good retention rates are being maintained. In late 1999, half of the recruiters had held onto at least 95 per cent of their 1998 intake (*ie* for their first year) and 72 per cent of their 1996 intake (*ie* for their first three years), although there are considerable variations around these averages. These figures have been remarkably stable over the last 20 years and at different points in the economic cycle.

Improving graduate recruitment

The major recruiters have rarely been able to get all the 'good' graduates they have sought. To improve this they need to recognise the diverse nature of the supply, and that competition for the best will remain intense. They do not always need, nor can they develop and retain, the 'best' graduates in all the roles they need to fill, so they need to consider the range of jobs and careers to be filled, the job specifications and competencies needed for each, and how they can be identified; qualifications may provide little guidance as to capability. Overemphasis on targeting particular institutions will restrict the pool of talent seen and maximise competition from other recruiters. The provision of work experience can help improve the supply and act as a filter, simplifying the recruitment and selection process. Appropriate and coherent recruitment, development and retention strategies, embracing the specialists and line managers who will be involved, are essential.

Improving graduates' job prospects

The possession of a degree or equivalent qualification is not a sufficient indicator of competence for particular jobs and careers. Whilst being largely beneficial to job seekers, it is not a passport to a good job. If graduates are to make an effective transition into this increasingly fragmented labour market, they need to ensure they develop their employability skills:

- their assets (knowledge, skills and attitudes)
- career management skills (awareness of their strengths, weaknesses, and adaptability)
- self-presentation skills.

In this they need to be supported by up to date and accessible careers information and guidance before, during, and after they graduate.

Conclusion

The coming years are likely to see further fragmentation of the graduate labour market. Many more graduate jobs and graduates will become incorporated into the operation of the wider recruitment market. The graduate labour market that does exist will be focused on the activities of a minority of recruiters with structured recruitment schemes which will be focused, by virtue of numbers and the qualities sought, on a small minority of graduates.

1. Introduction

1.1 Introduction

The purpose of this *Review* is to provide a brief on the graduate labour market at the start of the new century. It builds on previous editions of the IES Graduate Review[1], and it draws on and synthesises a wide range of other published material. It has been prepared under the auspices of the IES Research Club.

Given the timing of this year's *Review*, the opportunity has been taken to reflect back on the some of the key changes affecting the graduate labour market since the 1960s, when the Robbins report (1963) ushered in the modern expansion of higher education. At that time the UK had a relatively small, elitist higher education system. Under ten per cent of young people entered higher education, with just over 30,000 entering full-time first degree courses in the 31 universities. In 1963 some 24,000 students graduated with first degrees, and similar numbers with teaching qualifications, diplomas or higher degrees. In contrast, the UK now has a mass higher education system with over 35 per cent of young people entering higher education. There are now more than 1.7 million students studying at over 250 universities and colleges, with many taking HE courses in FE colleges. Over 250,000 graduate each year with a first degree and 115,000 more with sub-degree or postgraduate qualifications.

The labour market has also changed dramatically over this period. It has moved from a relatively stable industrial structure, dominated by manufacturing, utilities and other industries with large numbers of manual workers, to today's more volatile, service based economy, with much stronger international competition and connections. It is increasingly dominated by white collar jobs. Indeed, parts of the labour market may be at a point of further upheaval as deregulation, the rise in consumer power, technology and globalisation rewrite the employment landscape again in the early years of the new century.

This Review, therefore, provides a briefing on key trends for graduate recruiters, employers and others concerned to

[1] The first edition was published in 1982 (Pearson, 1982).

understand the interface between the supply of graduates, recruitment and the labour market.

1.2 The review

The format of this *Review* is one of a commentary followed by a series of graphs and figures which illustrate key trends and characteristics.[1]

Chapter 2 sets the scene by mapping the broad employment trends and emerging skill needs. Chapter 3 examines the changing supply of graduates since the 1960s and the expected trends in the first years of this century. The demand for graduates is considered in Chapter 4, as are the employment and other experiences of graduates in their early years after graduation. Chapter 5 then draws together the key features and conclusions, highlighting the key challenges facing employers and graduates in the coming years.

A series of over 30 figures follows, mapping the key trends and characteristics of this changing market.

Appendices detail the relevant references and sources of further information.

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[1] Consistent time series data are not available for the whole period 1960-1999 so some estimates are included; in other cases, time series can only start in the 1980s or 1990s.

2. The Changing Employment Context

2.1 The shift to a service based economy

Overall employment levels have grown slowly since the early 1960s, with steady recovery from the declines in the recessionary periods of the mid 1970s, the early 1980s and the early 1990s. In 1999, employment totalled 27 million, of whom 24 million were employees and a further three million self-employed.

The economy has restructured in response to a wide range of factors, including competitive pressures, technological and organisational change, and the emergence of new activities. This has led to industrial employment, in sectors such as manufacturing, energy and construction, falling from a peak of over 12 million to 6.5 million: under one in four of those now in employment. This decline has, however, been counterbalanced by the rise in service sector employment. A small part of this shift has, however, been accounted for by a statistical reclassification (for example, when a manufacturing company outsources its transport, catering or IT, the jobs reappear classified under service sector employment) (Figure 2.1).

The years around the turn of the century are proving to be a particularly dramatic point in this evolution. Employers and recruiters are seeking to meet the ever growing challenges of global competition, more rapid rates of technological change, the growth of consumer power and the changing expectations of the workforce. These pressures are all changing the balance, distribution and content of jobs at an ever faster rate. Indeed, while many outsourced jobs are being moved from the traditional employer to, for example, call centres around the UK, many are also being moved and sourced outside the UK (Huws, 2000).

In manufacturing there are major sectoral differences, with the high value added sectors such as electronics and IT growing fast, along with car production which has also benefited from inward investment, while many traditional firms in sectors such as textiles and clothing continue to contract. Cross-border mergers and consolidation are also leading to rationalisation of jobs in sectors as diverse as the pharmaceutical and defence sectors.

Telecoms, IT, and business services are benefiting from the growth in new services, the economy and outsourcing, while

retailing is responding to an apparent segmentation of the market and the arrival of Internet shopping. As yet, no one knows how this will impact in terms of jobs and indeed where the jobs will be: in the pure Internet companies, in the rapidly responding traditional players, or in those organisations concentrating on delivery. In banking and financial services, new technology and the Internet are major forces for change, with a growth in employment in call centres and a decline in the high street. Meanwhile, reduced barriers to entry by foreign-owned and sourced organisations is rewriting the map for financial services. In the media sector, traditional sectoral boundaries are also falling as newspapers go online and TV companies move into Internet retailing, and small firms and self-employment proliferate. The catering and hospitality industries are also growth sectors, and while they may not be major recruiters of the highly qualified, they are expecting staff to have ever-higher customer and interpersonal skills. Finally, in the public sector, outsourcing, performance league tables and the Civil Service *Modernising Government* initiative are leading to major changes in the balance of jobs and the skills needed. Staff are having to become more accountable for delivering clearer service outcomes, whether they are in local or central government, teaching, or the health service.

The growth in employment has also been boosted by the increased participation by women in the labour force. In 1961, only one in three of women over the age of 15 were working; nowadays over half do so. At the same time, the proportion of working men in these age groups has fallen from 85 to 66 per cent. This is caused by rising levels of participation in education amongst the young, with many staying in, or returning to education in their mid-20s, and rising levels of retirements among those aged over 50 (Figure 2.2). As a result, women now account for over 40 per cent of the workforce, up from one-third in 1961.

The proportion of people working part time has also risen, from nine per cent in 1961 to over 25 per cent, and is expected to move towards nearly 30 per cent in the early years of the century (Figure 2.3). This has come about due to a number of factors, including the decline in manufacturing and rise in services, related changes to the occupational profile of jobs, employers' need for greater flexibility in deploying staff to meet business patterns, and the preference of many workers, especially women, for part-time working.

Self-employment has also grown with the rise of the service sector. There was particularly rapid growth in the 1980s with the numbers nearly doubling to 3.4 million, over 13 per cent of those in employment. A wide range of factors underpinned this growth including structural changes and the rise in unemployment, regulatory, financial and public policy changes, and a growth in 'outsourcing' or contracting out of business services. Since then

the numbers have fluctuated, mirroring changes in economic conditions, but the proportion in self-employment has yet to reach the previous peak in 1991 of 13 per cent (Figure 2.4). The main occupations of the self-employed are managerial, professional, and craft, including many in the construction sector (Meager, 1998).

The unemployment rate[1] at the end of the century is regarded as being at a modern low of under five per cent. This represents a major decline from the peak of over 13 per cent in the early 1980s. The level is still high compared with that in the 1960s, when it was well under five per cent, and somewhat lower over the period back to 1945. The unemployment figures are one of the few administrative data sets that go back to the 19th century. They are presented here to demonstrate the long, stable period of low unemployment over the period 1945 to the early 1970s. The higher and more volatile levels of unemployment in the 1980s and 1990s have more in common with the 19th century and the first half of the 20th century (Figure 2.5).

Assuming the economy continues to grow at its long-term rate, the overall level of employment is expected to grow by about five per cent over the decade to 2006. Given the rapid rates of change in the economy, there is uncertainty as to which types of organisations will be employing what types of staff over this period. Nor is it certain how many will be employed, where they will be located, or what skills will be needed. However, some broad trends are clear.

2.2 The growing demand for high level skills

The changes and pressures noted above have led organisations to increase the skills profile of their workforce, while increased international competition, technology and improved working methods have taken out many lower skilled jobs. The related shift from the low to higher valued added manufacturing sectors, and to services, has also meant growth being focused on jobs requiring higher level skills in all sectors and occupations.

Since 1960 the proportions employed in managerial, and administrative jobs has grown more than six-fold, those in professional and technical occupations have more than doubled, while the numbers in sales occupations have been broadly static. Clerical employment has shown 25 per cent growth but there has been a one-third decline in the numerically large group of 'other occupations', which includes many manual jobs (Figure 2.6).

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[1] Definitions used have changed over time; the figures presented here are based on registered unemployed and show the broad trends over time. The alternative measure is derived from the Labour Force Survey and gives slightly higher totals.

Looking ahead, the econometric forecasts in the UK and most mature OECD economies point to a continuing growth in the demand for people with high level skills, and continued decline in opportunities for the unskilled (OECD, 1998). The latest UK econometric forecasts (IER, 1999) suggest that the numbers employed in managerial and high level administrative positions will grow by about eight per cent over the decade to 2006, and those in professional occupations by nearly 20 per cent. The particular occupations within these groups which are expected to show the most growth are health professional and 'other professions' including lawyers, accountants, architects and social workers. Growth at associate professional and technician level, where more graduates have been finding employment in recent years, is also projected to rise by nearly 15 per cent. Personal and protective services in sectors such as catering, cleaning and security are also expected to show particularly rapid growth. A small decline is expected in clerical and secretarial occupations, reversing the long-term growth in their numbers. Major continuing declines are expected in craft and related occupations, and other (largely unskilled manual) occupations (Figure 2.7).

These occupational changes mask another important change in the need for skills, namely the rise and broadening of the skills needed within occupations. The days of the single skilled craftsmen or narrowly focused technical expert or 'boffin' are long gone. The challenge for organisations is to have a flexible and responsive workforce which can respond to what are often, as yet, ill-defined challenges and customer needs. Of particular significance for virtually all types of jobs, both technical and non-technical, is the growing importance employers are placing on recruiting people with the right 'soft', non-subject based attributes. Jobs are becoming increasingly demanding, and an organisation's competitive strength relies on the overall quality and responsiveness of its workforce. As noted in last year's *IES Annual Graduate Review* (Pearson *et al.*, 1999a) many employers are now starting to define more rigorously what they are looking for in potential graduate recruits. However, articulating, defining and assessing such skills and values is fraught with difficulties. There is a lack of common terminology, with terms such as behavioural, generic, transferable, soft, non-occupational, and organisational all being used interchangeably. The breadth and complexity of the key skills that are often talked about is illustrated in Figure 2.8.

All this is changing the employment map in terms of the jobs available and the skills being sought, with profound consequences for those seeking graduates. At the same time, the numbers and profile of the graduates seeking work has also been transformed, as detailed below.

3. A Graduate Elite No More

3.1 The growth in higher education

In the early 1960s the UK had what was regarded as an elitist higher education system. Thirty-one universities enrolled under six per cent of young people as undergraduates, with another four per cent entering teacher training and other forms of higher education.

The expansion of higher education was, however, under way at this time with the establishment of the new universities such as Sussex and Warwick, and the Robbins Report of 1963 underpinned further expansion. The numbers entering higher education grew steadily from the 1960s until the early 1980s. The government then put a brake on expansion. In part this was to limit the growth in public expenditure and in part because there was expected to be a downturn in the demand for places. The number of 18 year olds was projected to decline by some 35 per cent over the period to the mid 1990s (Figure 3.1). This decline gave rise to the great scare about the 'demographic time bomb' and the shortage of young people both to enter higher education and the labour market.[1] At the time, the fact that the decline in the number of young people from middle class families (the then dominant entry group to higher education) was very small, was overlooked in the official forecasts, and even subsequent forecasts still suggested a small decline in applications (Pearson *et al.*, 1989). In practice, the numbers of applications continued to grow in absolute terms and has always exceeded the supply of places. There have, however, have been subject imbalances; places in some institutions, on some courses, in subjects such as engineering, physics and the humanities have been under-subscribed.

In the mid and late 1980s, government policy shifted back to one of expansion driven both by concerns that there would be shortages of new graduates (DfEE, 1990) and also the need to widen access, with financial incentives being offered to the

[1] In the event, the shortage of young people to enter the labour market was masked by the recession of the early 1990s.

universities and then polytechnics[1] to expand. Some institutions did this with gusto, introducing access and marketing programmes and boosting intakes. Growing numbers of entrants came from non-traditional sources, including mature applicants, those with vocational and non-traditional entry qualifications, and the ethnic minorities. Others, however, showed much less change. Overall there was an exceptionally rapid rate of growth in the decade from the late 1980s, with the number of entrants and those graduating doubling (Figure 3.2) before plateauing again (see Section 3.4).

There are now over 1.7 million students in higher education, a near ten-fold increase since the 1960s. While most of the attention is focused on full-time first degree students, they only accounted for half of those studying 1998; another ten per cent were studying part time for first degrees, while the balance was split between other undergraduate courses, and postgraduate study. In the latter, the numbers of full- and part-time students were broadly equal.

3.2 The changing student population

Young people have been and continue to be the main entry group entering higher education. In the early 1960s older, 'mature' entrants were a small minority and nearly 90 per cent of undergraduate were aged 22 or under. Despite the fluctuations in the numbers of 18 years olds in the population (Figure 3.1), the number of young people applying to, and entering higher education has continued to grow since the 1960s, with the active encouragement of government over most of this period, as noted above.

The most critical driver in the demand by the young for higher education has been the staying on rates in schools. Seventy per cent of 16 year olds remained in full-time education (including the FE sector) in 1998/99, more than double the proportion of the 1960s. The proportions of 18 year olds in full-time education also doubled over this period. It reached a peak of 40 per cent in 1995/6 before showing a small decline in subsequent years, which is thought to be related to the improvement of the economy and increased availability of employment (Figure 3.3).

Paralleling this has been the rise in the numbers achieving 'A' level[2] passes, the normal entry requirement for higher education. The numbers with one or more passes increased from just over 50,000 in 1962 to over 300,000 in 1998, with a higher proportion, 82 per cent (over 250,000) having two or more passes (Figure 3.4).

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[1] Polytechnics were redesignated as universities in 1992 and the higher education system unified with the abolition of the 'binary line'.

[2] or Scottish Highers, the equivalent qualification for entry into HE in Scotland.

As a result of these developments, the proportion of young people participating[1] in higher education has risen from under ten per cent in the early 1960s to over 35 per cent in the late 1990s (Figure 3.5).

While the majority (70 per cent) of entrants to first degree courses in 1998 were still accepted on the basis of traditional, non-vocational qualifications (*ie* 'A' levels or Scottish Highers) the proportions with vocational and other qualifications has risen from under three per cent at the time of Robbins to 30 per cent in the late 1990s,[2] with the biggest growth coming in the 1990s (Figure 3.6). There are strong subject differences, with medicine and dentistry taking few entrants with non-traditional qualifications, while in languages and physical sciences they accounted for under ten per cent of entrants. There are much higher proportions in the vocational areas such as creative arts (over 40 per cent) where many degree courses require some previous vocational study or portfolio preparation, and in business studies, creative arts, education and mathematical sciences (Pearson *et al.*, 1999a).

As higher education has shifted from an elite to a mass system, so has the composition of the student body changed. While the number of young entrants grew, so did the number of older, or 'mature' entrants. These accounted for one in three entrants in 1998, up from one in ten in the 1960s. Older students also tend to study different subjects, with relatively few taking physical science and engineering degrees, and rather more in social sciences, creative arts and education (Pearson *et al.*, 1999a).

Women accounted for only one in four undergraduates in 1962 but are now the majority (54 per cent) of entrants to first degree courses. This growth in participation took place steadily throughout the period and passed the 50 cent point in the early 1990s. Their subject profile, however, continues to be markedly different from that of men. In particular, women are most likely to be found on social science, medicine and nursing, education, languages and biological sciences courses. Men continue to be the majority in the physical sciences, engineering and technology, and mathematical sciences — which includes computing (Pearson *et al.*, 1999a).

Despite the attempts to widen access, the social class composition of higher education has not changed as fast as many had hoped. Entry is still dominated by those from families in social classes I and II (professional and intermediate): 60 per cent of the intakes

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[1] This has been calculated in different ways over the years. The trends, not the detail, is the important point to note.

[2] Drawing a clear trend is complicated by the merging of the university and polytechnic sectors in 1992, as no data are available for the non-university sector prior to 1992.

in 1998. The proportion coming from families in social classes IV and V (defined as being in partly and unskilled occupations) has only grown from five to ten per cent (Figure 3.7).

Attempts to widen participation have also focused on the ethnic minorities and here numbers have increased significantly during the 1990s when overall entry was also growing. They accounted for over 14 per cent of accepted applicants in 1998, up from ten per cent a decade earlier (Figure 3.8). This representation is slightly higher than the population of this age group in the wider population. There are, however, large differences between the different ethnic minority groups. The Asian Indian ethnic group has the highest representation in higher education, while there is general under-representation of Moslem women and young Black Caribbean men. There are also significant differences between the subjects they are studying, with particularly high proportions in medicine, mathematical sciences and business studies, and much lower than average proportions in the humanities, languages, arts and education (Pearson *et al.*, 1999a).

This diversity accompanying the shift from an elite to a mass higher education system has given educationalists many challenges as they seek to relate to students with a wide range of backgrounds and expectations. The introduction of fees is also encouraging students to act as paying consumers, many of whom are now demanding higher levels of 'service'.

3.3 How students choose their degree course

Motivations towards higher education, and the different types of institutions and courses vary greatly between young and mature applicants, and between ethnic groups. Influencing factors include the qualifications held, routes into higher education, social class, family income and family experience of higher education (Connor *et al.*, 1999). Their main priority, however, is to choose the right subject, with gender the factor most likely to affect subject choice, as noted above. Next in importance are quality (particularly in terms of teaching, and academic support and facilities), overall image, and employment prospects for graduates. Priorities do, however, vary between different groups of students and while good employment prospects arising from their course are important for most applicants, this is especially the case for women, black and Asian applicants, and Scottish applicants (Figure 3.9).

Over the last decade the maintenance grant was steadily reduced and has now been abolished; means tested fees were introduced in 1998.[1] Cost is therefore a significant factor in the choice process, particularly for non-traditional student groups, encouraging

[1] Separate arrangements now apply in Scotland, see Section 3.5.

increasing numbers to study close to home and/or on a course where there are good employment prospects. While most feel well informed on most aspects of higher education, the majority estimate the costs of study to be in the range £2,000-5,000, excluding fees (Connor *et al.*, 1999). This is below the £5,900 which is the latest estimate of living costs (Cubie, 1999). Most expect to have to work while they are students; their preference is to work during the vacation rather than in term time, which gives a boost to moves to widen work experience for undergraduates. A high proportion of undergraduates, more than one in three, currently work during their course, but only a minority say that the work is relevant to their chosen career. Nevertheless, work experience can enhance more general employability skills, especially if students use it as a learning experience (Harvey, 1998) and not just as a means to supplement their income. Indeed, recent US research has shown that small levels of term time working can also be beneficial to a student's results (Pearson *et al.*, 1999a).

Most applicants use the formal sources of information to guide their choices, such as the UCAS Handbook, prospectuses and university visits. They also consult a wide range of individuals, from family and friends through to professional careers advisers. While they are largely satisfied with the information and advice available at the time, a range of improvements are needed to ensure students make well informed choices about courses, including the relevance of courses to subsequent employment and careers (Figure 3.10) (Connor *et al.*, 1999).

3.4 Graduate numbers

The numbers graduating from higher education each year have grown from under 50,000 in the early 1960s to nearly 400,000 at the end of the 1990s. Of these, over 250,000 had first degrees, 65,000 had completed postgraduate degrees and 50,000 qualified from sub-degree courses such as HNDs (Figure 3.2). These levels of graduation match those of our international competitors, with UK higher education being seen as more responsive to the needs of the labour market than is the case in many other European countries (Pearson *et al.*, 2000).

Between the 1960s and 1998, the distribution of first degrees between the subjects showed a relative decline in the case of humanities, down from 38 per cent to 22 per cent of the total. It also showed a small decline in the case of science and technology, down from 40 to 35 per cent, while the proportion qualifying in the social sciences grew from 18 to 30 per cent. In 1998 there were over 29,000 first degree graduates in business and financial studies, another 30,000 in social studies and 19,000 in creative arts. In contrast, there were 22,000 in engineering,

13,000 in physical sciences and 14,000 in maths and computing (Figure 3.11).

3.5 Looking ahead

The government put the brake on expansion again in the mid-1990s but the number of applications continued to exceed the overall number of places. However, subject imbalances exist and some courses remain undersubscribed. There was a surge in applications in 1998 to beat the introduction of fees, with some students putting off their gap year. Since then the number of young applicants has grown slightly, but the number of applications from mature students has fallen back (UCAS, 1999). Projections carried out in 1996 over the period to 2005 suggested there would still be considerable potential and unmet demand for higher education through the early years of the new century. The number of entrants was projected to grow by ten per cent or more by 2005, if current trends at the time were to prevail, and sufficient places were made available (Connor *et al.*, 1996a). In the event, the introduction of fees and the final abolition of maintenance grants in 1998 appears to have restricted that growth in the short term, but the longer term consequences are not yet clear.

The government has now said that future expansion should focus at sub-degree level with two year 'foundation degrees'. Particular emphasis will be on vocational courses and greater provision of part-time and modular options, and the possibility for these graduates to progress to complete a first degree. Much of the increased provision is likely to take place in FE colleges. It is not, however, clear whether there will be employer demand for those with such foundation degrees, and whether large proportions will choose to stay on to complete first degrees.

In Scotland, following the publication of the Cubie report (Cubie, 1999), the payment of fees by Scottish students is to be abolished, with Scottish students having to make a partial repayment when they earn over £10,000 per annum. English and Welsh students still have to pay fees wherever they study. In England the government has, however, announced extra funding for students to encourage wider access, and fee waivers for part-time students. The issue of universities charging supplementary fees to boost their incomes is also coming back on the agenda. This is all likely to put great pressure on the government to amend the position on fees. These changes, in turn, are likely to further affect student demand for places.

The UK has now moved from an 1960s elite, to a mass higher education system at the start of this century. With great diversity among the education on offer and the student body, this is having profound implications for recruiters and graduates alike as they enter the employment market.

4. Graduate Recruitment and Employment

4.1 Graduate recruitment into mainstream employment

In 1965 nearly 13,000 new first degree graduates (40 per cent) entered employment (Figure 4.1). Of these nearly 4,000 went into the public services, including medicine, education and the civil service, and 8,000 into industry and commerce. Many of the latter were recruited into management training schemes where they had structured career development and career paths. By the early 1970s there were growing concerns that there would not be enough 'suitable' jobs for the increased numbers graduating (DfEE, 1974). In the event, an analysis of the market at the time showed that graduates were being recruited through three streams, each of which had different characteristics and growth prospects.

- **Management trainees** were recruited by large organisations in relatively small numbers to enter formal training and development schemes. The recruiters targeted key campuses through the 'milk round', and the personal qualities of the graduates were more important than their discipline. The number being recruited in this way were not expected to grow significantly.
- Others entered into **professional and functional** roles, *eg* in engineering or accountancy, and where the increased skill needs of the professions, and specialists' functions and occupational changes, were expected to underpin growth in the demand for graduates.
- Others were recruited as **direct entrants** into a wide range of (normally larger) organisations. They were often in direct competition with non-graduates. This, for example, was the starting point for graduate recruitment into the retail sector. There was great potential for expanding graduate recruitment in this way, but numbers were expected to fluctuate strongly according to economic circumstances.

Overall, the number of opportunities was expected to expand, the extent being subject to the vagaries of the economic cycle (Pearson, 1976).

Since then, graduate recruitment has grown significantly. Major recruiters were seeking an estimated 20,000 or more graduates in

the mid 1980s (Parsons, 1986) in sectors such as chemicals, electronics and the utilities, along with the public sector and accountancy which was then growing its intakes fast to become what is now a major recruiters of graduates. The legal profession has followed, seeking significant numbers, as have the police and nursing. The IT sector and retailing[1] grew their graduate intakes dramatically in the 1980s and 1990s. Many more small organisations are also now actively seeking graduates through structured recruitment schemes, as evidenced by the growth in the coverage and membership of the Association of Graduate Recruiters.

While the overall numbers being recruited by the major graduate recruiters through graduate recruitment schemes have fluctuated with the economic cycle, little growth has been seen in the decade since the late 1980s economic boom (Pearson *et al.*, 1999a). Intakes then were estimated to be around 30,000, with other significant recruitment being into teaching and medicine, between them also taking more than 30,000 graduates per annum. Since then the numbers entering employment have continued to grow as the numbers graduating more than doubled.

Vacancies for graduates among the major recruiters unexpectedly fell in 1999. The reasons for this are not clear but it may be a reflection of the multi-speed economy. The outlook in some graduate intensive sectors was looking unclear as a result of the spate of mergers, alliances and associated business uncertainty, concerns about recession at the start of the year, the cutbacks in retailing, a pause from growth in the IT sector, and continued retrenchment in manufacturing. Forecasts for 2000 suggest a recovery, with vacancies growing by about 20 per cent or more, the growth being concentrated in the service sector (Jagger *et al.*, 2000a).

While the overall numbers graduating have increased (Figure 3.2), the proportion entering employment within six months of graduation also rose, from 40 per cent in the 1960s to over 60 per cent in the 1970s. This has since fluctuated between highs of around 60 per cent at the peaks of the economic cycle and lows of 50 per cent in the recessionary periods of the early 1980s and the early 1990s (Figure 4.2).

Notwithstanding the economic cycle, graduates have been taking longer to settle into 'permanent' or 'stable' career patterns, and more have been entering employment where their graduate qualification has not been a necessary entry requirement. Partly this has been out of choice, and partly because they have found it harder to find suitable jobs and careers. During the 1990s, a period of particularly rapid expansion in the numbers graduating coincided with an improvement in the economy. The overall

[1] although their intakes have now fallen back for economic reasons, and some others have shifted away from graduate to 'A' level entry.

numbers moving into employment rose from just over 100,000 to over 160,000, although a rising proportion entered fixed-term or temporary employment (Figure 4.3).

There has also been a shift in the occupational profile of those entering employment during the 1990s, with a noticeable decline in the proportions going into professional occupations, and an increase in those entering associate professional and technical occupations and other, generally lesser skilled, occupations. Of those going into employment in 1998, half went into what have traditionally been considered graduate jobs, *ie* as managers, administrators and professionals. A further 17 per cent went into associated professional and technical occupations, not generally considered to be of graduate level a decade ago. One-third went into lower level jobs (Figure 4.4).

There are also marked differences between graduates from different disciplines. Those from the humanities, languages, biological sciences and the social sciences have been the least likely to enter 'graduate jobs,' *ie* as managers and administrators, professionals, and nowadays into associate professional and technical occupations. Those in medicine, education, computer science and engineering have been the most likely to enter 'graduate jobs'. Among those entering employment in 1998, those in business studies, languages, humanities and the social sciences were more likely to go into management roles, while those in engineering and the sciences were more likely to go into professional roles (Figure 4.5).

Thus, overall, while increasing numbers have been entering employment, more have been going into temporary jobs and 'non-graduate' jobs.

4.2 Expansion has not solved employers' recruitment difficulties

Despite the growth in the number of job seekers, recruiters have never seen a period when there have been enough 'good' or 'relevant' graduates (see *eg* Swan, 1968). Time series data on employers' difficulties recruiting graduates only start in the late 1970s. These show that the incidence of reported recruitment difficulties among the major recruiters has been strongly influenced by the economic cycle and were not mitigated by the boom in output in the 1990s (Figure 4.6). While these recruiters were seeking similar numbers in the late 1980s and late 1990s, the doubling of the number graduating over this period only partially eased the incidence of recruitment difficulties by the late 1990s. However, the severity for individual recruiters was not as bad as in the late 1990s. This reinforces the more qualitative evidence that recruitment problems nowadays relate more to issues of quality rather than quantity, with a particular concern focusing on graduates' lack of good personal attributes rather than their technical skills (see Section 2.2).

Scientists and technologists have been regarded as one of the key resources needed to underpin the UK's science and technology base and maintain and enhance the competitiveness of key sectors such as pharmaceuticals and electronics. Attention has been paid to the (lack of) availability of suitably trained graduates since the mid 19th century, and numerous enquiries and reports since Robbins have expressed concern that there were so few good science and technology graduates going into industry or teaching. The evidence from the employers of scientists in the second half of the 1990s does not suggest that there is a widespread problem in terms of an inadequate numerical supply of science skills, but there are qualitative issues. There are, however, problems for some employers, *eg* higher education, where employment packages may not be competitive, which in the sciences includes the use of up to date equipment. Problems also exist in some areas of teaching, and in the case of some very specialist skills, such as electronics. The most frequently quoted problems in the UK relate to the personal qualities of potential recruits and the need for recruits to have better 'personal' skills and competencies in areas such as business awareness and commercial skills, project management, team working and communication, alongside their technical competence (Pearson *et al.*, 1999b; Mason, 1999). This is a concern raised about non-science, graduate recruits (Section 2.2). There is, however, evidence of an over-supply of some science graduates, especially biologists, who have difficulty moving into jobs and careers where they can use their scientific skills. They have longer-term problems of under-employment and lower relative earnings, and many move into technician level roles, or areas unrelated to science. This is not a recent trend and is expected to increase in future years. Similar patterns are also to be found in other European countries and, to some extent, the United States (Pearson *et al.*, 2000).

4.3 Starting salaries

Despite the resurgence of recruitment difficulties with the economic upturns, the major recruiters[1] have not responded by markedly raising starting salaries for graduates. While the headline starting salaries for some graduates seem to rise ever higher, with a few recruiters paying in excess of £25,000 for new graduates in 1999, changes to the median starting salary (£17,500 in 1999) largely tracks the steady rise in median weekly earnings. In the early and mid 1990s the rate of growth of graduates' starting salaries lagged the growth in median weekly earnings but has since started catching up again (Figure 4.7). A similar pattern prevailed in the 1980s (Pearson *et al.*, 1999a).

[1] These figures come from the membership of the Association of Graduate Recruiters (AGR).

Median figures can, of course, hide wide differences. While the median starting salary in 1999 was £17,500 among the major recruiters, the lowest ten per cent were paying nearer £15,000. Teachers were starting on £15,537 (and £17,778 or more in central London). Figures for a broader group of jobs advertised for graduates shows salaries on average over £1,500 lower (CSU, 1999). Many graduates move into jobs paying far less (nearer £10-12,000 per annum), including some going into accountancy and the law training outside London, and especially where graduates are entering lower level jobs and competing with non-graduates.

4.4 Graduate salary progression and retention

Given the diversity of jobs graduates enter, it is not possible to talk about the career progression of a 'typical' graduate. It is, however, possible to focus on salary progression and retention among the major recruiters.

Evidence on salary progression among the major recruiters shows that the median salary in mid 1999 for graduates recruited in 1998 was £19,950 (an uplift of 14 per cent on that paid to a 1999 recruit) and for those recruited three years earlier (*ie* in 1996) it was £24,000 (an uplift of 37 per cent). There was, however, a wide range reported, with an upper decile of £25,000 and lower decile of £16,500 for those with one year's service, and an upper decile of £31,000 and a lower decile of £17,750 with three year's service (Jagger *et al.*, 2000a). Another comparison of the 1998 salaries of those who graduated three and five years earlier (in 1995 and 1993 respectively) also shows very wide salary ranges, with an average salary uplift of 41 per cent for those recruited three years earlier (comparing as above) and 69 per cent for those recruited five years earlier (IDS, 1999) (Figure 4.8). In both cases salary progression was faster in the service sector. These figures for progression were similar to those reported a year earlier.

Alongside progression, another important measure for recruiters is retention. This depends on a number of factors, including the initial selection by both recruiter and recruit, the variety and challenge of the work undertaken, subsequent professional development, relevant HR policies and good line management, including access to individual career planning and mentoring schemes, and long-term career prospects. Salary increases can also be important, but they are not normally the dominant reason for staff leaving. Along with retention bonuses, golden hellos or golden handcuffs, these are only a significant issue or benefit in a small number of cases (Bevan *et al.*, 1997; Sturgess *et al.*, 1999). It is also important to recognise that mistakes will be made both by the recruiters and the graduates themselves, and that some losses are inevitable, while very high retention can inhibit the career progression of more recent recruits.

The evidence from the major graduate recruiters is that, on the whole, despite the increased competition for the 'best', relatively good retention rates are being maintained, though again the average figures conceal considerable variation. In late 1999, half of the recruiters who had figures available had held on to at least 95 per cent of their 1998 intake (*ie* for their first year) and 72 per cent of their 1996 intake[1] (*ie* for their first three years). The best ten per cent of recruiters had held on to 90 per cent or more of graduates recruited three years earlier (Jagger *et al.*, 2000a). These figures are remarkably similar to those being experienced in the late 1970s, a period of economic growth, the early 1980s a period of recession, and the early 1990s, a period of recession (Figure 4.9) (Parsons, 1986). These 'averages' do, however, hide a wide variation between organisations, with some losing half their intakes within two years, while other have only lost ten per cent over five years.

4.5 Many graduates have other destinations

While the majority of graduates go directly into 'mainstream' jobs within a few months of graduating, not all do so. A small minority go into self-employment, assisted by a number of schemes which are encouraging and helping graduates to start their own businesses and enter self-employment. In part this is a response to the lack of growth of 'traditional' job vacancies, but it also reflects the national emphasis to build a more entrepreneurial society. The overall proportion of new graduates recorded as going into self-employment has remained low, at under two per cent, although this a particularly important destination for those studying on art and design courses. Here their careers resemble a patchwork of short-term contracts and projects, self-employment and freelance work, as well as work outside their profession and with low monetary rewards. There is a particular need for such graduates to develop better negotiating and networking skills, as well as the broader personal and social skills (La Valle *et al.*, 2000). The wish to be self-employed or start their own business is not restricted to such groups, but was also to be found in others including conservationists (Jagger *et al.*, 2000b) as well as among those graduating from mainstream subjects such as science and technology, where the attraction was one of independence and freedom rather than high earnings (Tackey *et al.*, 1999).

Not all graduates go into employment; some go overseas, others withdraw from the labour market, while a growing minority are taking their 'gap year' after they graduate, rather than before they enter higher education. The major alternative to employment is taken by those who stay on for further study or research. This

[1] These figures may be affected by a high proportion of accountancy firms where trainees stay for three years to qualify and then leave. The drop-out rates while studying are not available.

was as high as 40 per cent in the mid 1960s, but the proportions doing so has been in decline since the late 1970s, falling to under 20 per cent by the 1990s. While men were markedly more likely than women to stay on for further study in the 1970s, the gender gap had largely closed by the late 1990s. Here again the economic cycle has had an effect, with the recessionary periods boosting the proportions staying on for further study, and being a greater influence on men than on women (Figure 4.10). Another major influence has been the availability of grants to finance postgraduate study, and these have not grown in line with the growing numbers graduating.

The final major balancing item on the destinations is the initial unemployment rate[1] which, not surprisingly, shows marked variations with the economic cycle, reaching highs of nearly 20 per cent in 1982 and 1992. The lows of six per cent in the late 1970s, seven per cent in 1989 and under eight per cent in 1999 all reflect high points in the economic cycle (Figure 4.11). There have always been marked variations between subjects, with medicine and education always having the highest rates of employment and lowest unemployment, and the biological sciences, languages and humanities having some of the highest initial unemployment rates (Figure 4.12). The balance between the subjects is similar to that found in terms of those finding 'graduate jobs' (Figure 4.5).

The overall balance of destinations (Figure 4.13) thus shows marked changes since the 1960s with far fewer staying on for further study, and a much higher proportion going into employment, although the 'quality' of the jobs now entered is very broad and graduates are taking longer to find appropriate employment.

4.6 Graduates are taking longer to settle into established employment

Some graduates are postponing their move into employment by staying on for further study or research, or taking a gap year. One in four graduates said they were taking such a break in 1998 (Guardian/NOP, 1998). In other cases, they are taking on temporary, relatively low skilled work while they consider career options, and or to pay off the debts incurred while they were studying. Others wanting to enter sectors such as the media and advertising often have to take low level jobs, sometimes without pay, to gain some work experience which may then give them an opportunity get a 'foot on the ladder' or as a stepping stone into a specific career. Many others, however, are finding it

[1] There are a number of ways in which this can be measured, the rate chosen here is that based on the international ILO definition. The First Destination Statistics (HESA) often provide an alternative measure.

hard to move quickly into satisfactory employment and are taking an increasingly long time period to settle into established jobs and career paths. Many are moving into associate professional and technician roles (Figure 4.4) which is expected to be a growth destination in the future (BSL, 1998).

With the rapid growth in the numbers graduating, substantial numbers of graduates are entering jobs that do not require degree level qualifications and are doing similar work to non-graduates (Section 4.1). The true extent is not, however, easy to measure and is complicated by the changing nature of jobs and work organisation. Some jobs which have traditionally been 'non-graduate' jobs, *eg* in technician roles, now require higher skill levels. Recruiters are seeking graduates to fill them, as in the case of laboratory work in the pharmaceutical industry, while professions such as accountancy, the law, and nursing moved to a graduate entry a number of years ago. In other cases, employers have been increasing the education requirements of jobs simply because more graduates are available, as was the case among the retailers in the early 1980s, while others recruit graduates because they apply. In some of these cases the graduates are adding value and 'growing' the job. For example, almost one in five employers have reported directly substituting graduates for non-graduates, although only one in four were doing this as a deliberate policy as opposed to a by-product of increased graduate supply. Just over half of the graduates surveyed in these companies said that some use was being made of their graduate skills, and in only one-third was good use being made of them (Nove *et al.*, 1997). These developments have been identified in a wide range of recent research (see *eg* Connor *et al.*, 1996b, 1997; Elias *et al.*, 1999).

While the 'quality' of these initial jobs was not always what graduates wanted, most graduates saw some career progression in terms of the quality of their jobs once they had been in employment for a few years. Graduates who had been in the labour market for three or more years were more likely to say their skills were being used as they moved into higher level, or more demanding roles, or found a graduate-level job. For example, four and six year years after graduation, a much higher proportion of graduates were in 'graduate jobs', defined as professional and managerial occupations, than at the two to three year stage. There was also a noticeable reduction in the proportion who felt under-employed (Connor *et al.*, 1997). These results have been borne out in a recent national study, with 65 per cent of all the 1995 graduates surveyed believing they were in jobs requiring their degrees after three years in employment. This study also showed that high initial rates of unemployment fall quickly over time. As with other elements of graduate supply and the labour market, there have been marked differences in the experiences of different types of graduates with, for example, those from the humanities, arts and biological sciences, older graduates and women showing least satisfactory progression

after graduation (Elias *et al.*, 1999). The improvements do, however, have to be set in the context of a rapidly improving labour market from the mid 1990s.

Being in an established or mainstream job or career does not, however, mean that graduates are settled. While retention rates are relatively good among the major recruiters (Section 4.3, Figure 4.9), one in five graduates were looking for a different job in 1999; interestingly this is a lower proportion than in the mid 1990s when unemployment was higher and there was less apparent alternative employment (Figure 4.14).

5. In Conclusion — an Ever More Diverse and Fragmented Labour Market

5.1 Introduction

At the start of the century, the labour market for graduates can be characterised by two words: 'diversity' and 'fragmentation'. Despite the strength of the economy, recruitment difficulties for graduates among the major recruiters eased in 1999, as vacancy levels fell. Vacancies, however, are expected to recover in 2000 (Section 4.1, Jagger *et al.*, 2000a). The need for graduate and high level skills has not gone away. Competition for the best graduates remains, and will remain intense, despite the large numbers graduating. Many graduates have to set somewhat lower horizons in terms of the jobs and careers they seek and can enter.

This Chapter provides a model of the clusters of jobs employers are seeking to fill, and highlights the diverse body of graduates seeking to fill them. It then draws out some key conclusions for recruiters and graduates as they seek a better match in an increasingly competitive and fragmented labour market.

5.2 A diverse range of jobs to be filled

The jobs graduate recruiters are seeking to fill have changed significantly in recent years, reflecting major industrial, occupational and business changes, and the speed of change is accelerating. While there remains a relatively small cohort of 'high flier' graduate jobs, graduates are being sought for and are entering an increasingly diverse range of jobs. Many large organisations are recruiting into more than one stream, offering a wide range of salaries and career paths. They are recruiting graduates throughout the year, often alongside non-graduates. In many cases, the central graduate recruiters are not involved in, and are often unaware of, the numbers entering in the latter way.

A model of graduate recruitment identifies entry to:

- **fast track management** training schemes which take limited numbers of graduates in large organisations. Recruitment is centrally managed and targeted on those with good intellectual and personal skills, often at selective universities.

Vacancy levels are not expected to grow markedly. The supply of suitable candidates appears limited, and competition for the best is intense.

- **professional and functional careers**, *eg* accountancy, engineering, IT and teaching. Recruitment is functionally based and initial development is often regulated by an external professional body. Vacancy levels are expected to continue to grow. In most, but not all cases, *eg* IT, the degree subject and course is important but personal qualities are growing in importance. The supply of suitable candidates appears limited for some functions. Recruitment is broader-based than above, but in technical areas may be focused on certain universities and courses.
- **'graduate level' administrative** jobs, providing initial training but more limited initial career prospects. Personal qualities are more important than technical qualifications. There are increasing numbers of these jobs, although vacancy levels fluctuate with the economic cycle. Vacancies may appear throughout the year and in many parts of an organisation, and in smaller firms. Graduates may be recruited alongside non-graduates, internal and experienced candidates.
- **self-employment**, where the rewards may be uncertain but lifestyle is more important; a traditional area for arts and design students.
- **lower level jobs where graduates can 'add value'**, upgrading the content and quality of the job. Here they may be in competition, and work alongside those with lesser qualifications. Vacancies can appear at many points and in all types of organisations. Vacancies will appear throughout the year, within the broader recruitment market, and will fluctuate with the economic cycle.
- **the wider labour market** in competition with, and working alongside, those with lesser qualifications where there may be little advantage in being a graduate.

5.3 With a diverse population graduating

The forty years since Robbins have seen major changes in the supply of graduates. The numbers graduating have grown ten-fold and are now far more diverse in terms of gender, age, ethnicity, qualifications and aspirations. Looking ahead, the numbers graduating are expected to rise very slightly. The government is seeking a significant expansion in the numbers graduating with two year 'foundation' degrees, with many courses being taken in FE colleges.

Diversity characterises the graduate population:

- one in three of the young now go on to higher education
- employability is an important factor in their choice of course

- two-thirds are still from the top two social classes
- one in three enter with non 'A' level qualifications
- they study at over 250 universities and colleges
- women are now a majority of those graduating
- one in three are over 25 when they graduate
- one in seven come from ethnic minorities
- many now study near home and may be less mobile
- growing numbers will graduate with sub-degree qualifications
- graduates have diverse aspirations and expectations.

5.4 Improving graduate recruitment

The supply has grown far faster than the number of traditional 'graduate jobs'. On the face of it, this would suggest that graduate recruitment should have become easier for recruiters. However, the history of the last twenty years is that the major recruiters have not been able to get all the 'good' graduates they have sought. In part this may reflect over-reliance on only recruiting from certain universities, or inadequately defined selection criteria. It is also a reflection of the shift in the types of skills sought; in particular, the growing emphasis on the need for recruits with the right personal qualities. This has become a requirement in vocational and specialist areas such as engineering and accountancy, as well as more general management roles.

Employers need to recognise that competition for the best will remain intense, and that they do not always need, nor can they develop and retain, only the 'best' graduates in all the roles they need to fill. They also need to understand the changing supply side and the nature of the competition for the types of graduates they seek.

Recruiters need to consider carefully the diverse range of jobs and careers they need to fill, the job specifications and the different competencies they need for each. They will need to learn how to identify the required attributes among applicants, when qualifications may provide little guidance as to their capability. Any overemphasis on targeting particular types of graduates or universities will unnecessarily restrict the pool of talent seen, and maximise the competition from other recruiters. The provision of work experience can help improve the supply of relevant graduates, and act as a filter to help simplify the recruitment and selection process.

Appropriate and coherent recruitment, development and retention strategies can then be developed, drawing in the specialists and line managers who will be involved.

Employers also have to recognise the diverse needs of the staff they recruit, and tailor their approach to staff development and motivation appropriately, if they are to meet and manage the aspirations of their recruits and build their workforce for the future. While the average levels of retention look reasonable, many employers need to monitor and understand their own levels of retention and progression to ensure that their long-term needs are being met, and to identify where problems may be arising.

Such strategies require careful planning, commitment and co-ordination. Today's internal labour markets and organisational structures are increasingly fragmented and fast changing; central management and records are often a thing of the past.

5.5 Helping graduates as job seekers

The rate of growth in vacancies for new graduates in managerial and professional occupations is expected to lag behind the overall supply. Many graduates will therefore have to adjust their expectations. Many will have to take employment in associate professional or technician level jobs, where job growth is expected to be strong and where graduates may have advantages over non-graduates in the job queue, or look for employment in the wider labour market. If they are to make a more effective transition into employment, they need to ensure that they have developed their personal and employability skills, in the light of their own circumstances, and in ways which can be analogous to the concepts of production, marketing and sales. They need good:

- **assets**, *ie* knowledge, skills and attitudes
- **career management skills**, *ie* awareness of their strengths and weaknesses, and adaptability, mobility and realism in relation to job search and choice, and
- **presentation skills**, *ie* be able to present and sell themselves, their work experience, and explicit and tacit qualifications through CVs, applications, tests and interviews (Tamkin and Hillage, 1999).

In this they need to be supported by up to date and accessible careers information and guidance before, during and after they graduate.

5.6 In conclusion

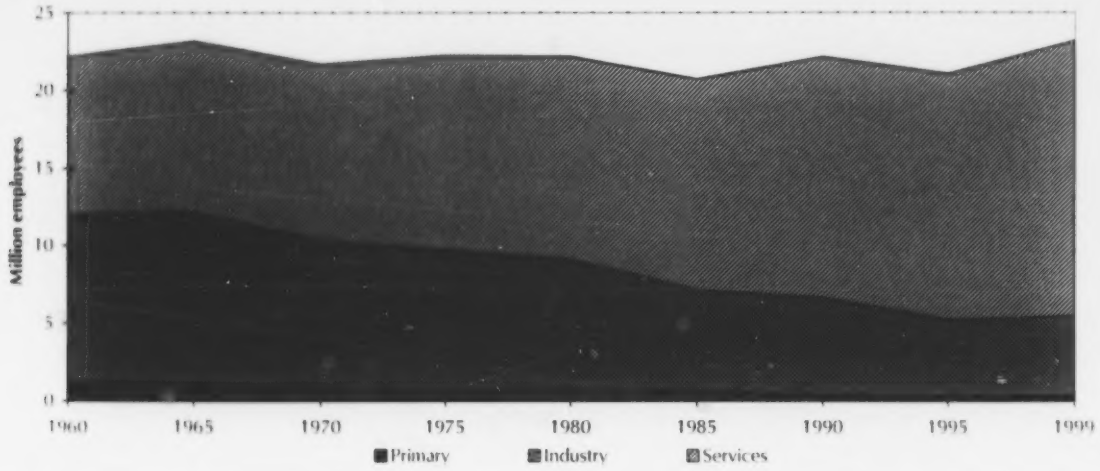
The coming years are likely to see further fragmentation of the graduate labour market, and indeed the incorporation of many graduate jobs and graduates into the operation of the wider recruitment market. The graduate labour market that does exist will be focused on the activities of a minority of recruiters with structured recruitment schemes which will be focused, by virtue

of numbers and the qualities sought, on a small minority of graduates.

To talk of a 'typical' graduate/graduate job/graduate recruitment scheme/graduate starting salary or graduate career would be to mislead. For most recruiters and most graduates, the transition from higher education into employment will take place within the context of broader labour market developments. For the individual, the possession of a degree or equivalent qualification is not a sufficient indicator of competence for particular jobs and careers. While it will be largely beneficial to job seekers, it will not be a passport to a good job.

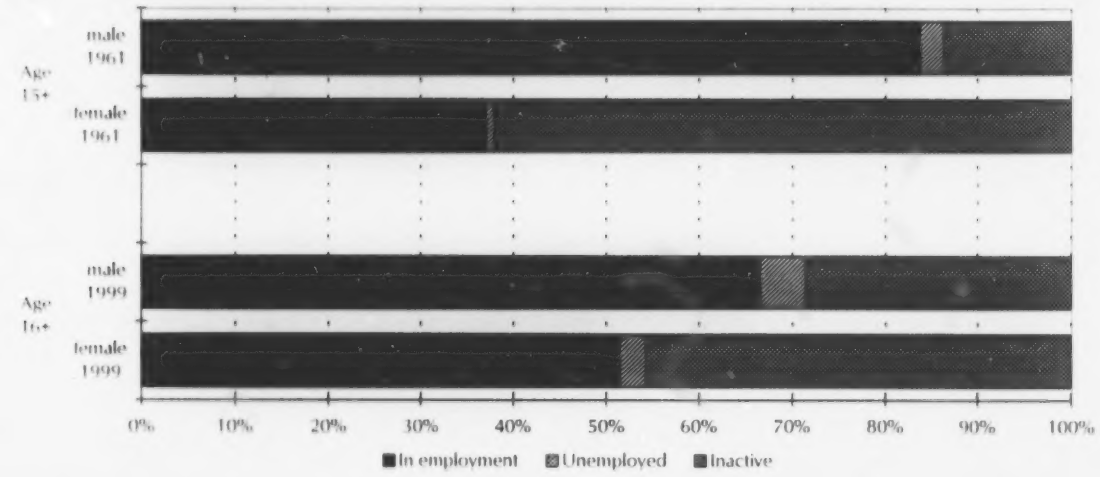
FIGURES

Figure 2.1: Employees by industrial sector in Great Britain, 1960 to 1999



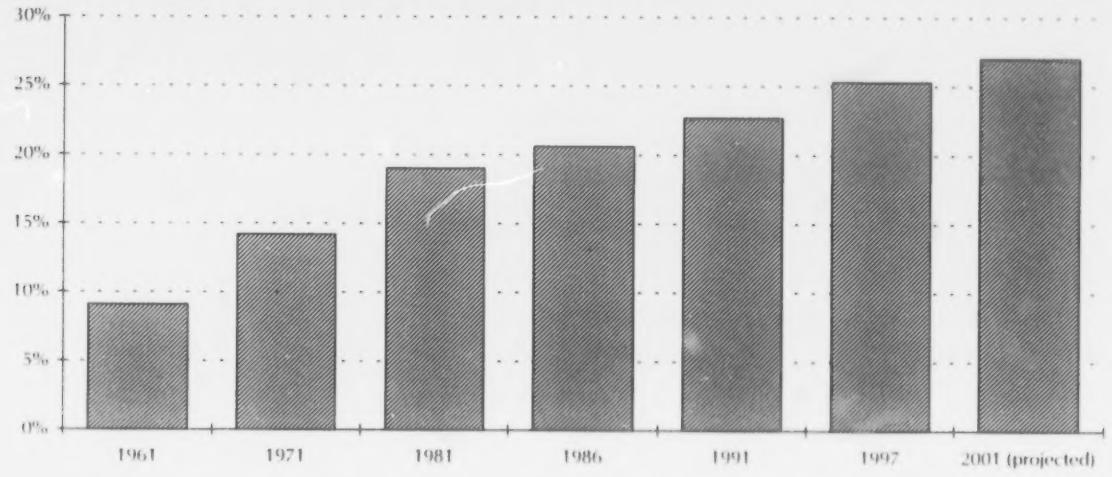
Source: IES/Annual Statistical Abstract/ONS (various years)

Figure 2.2: Economic activity by gender, 1961 and 1999



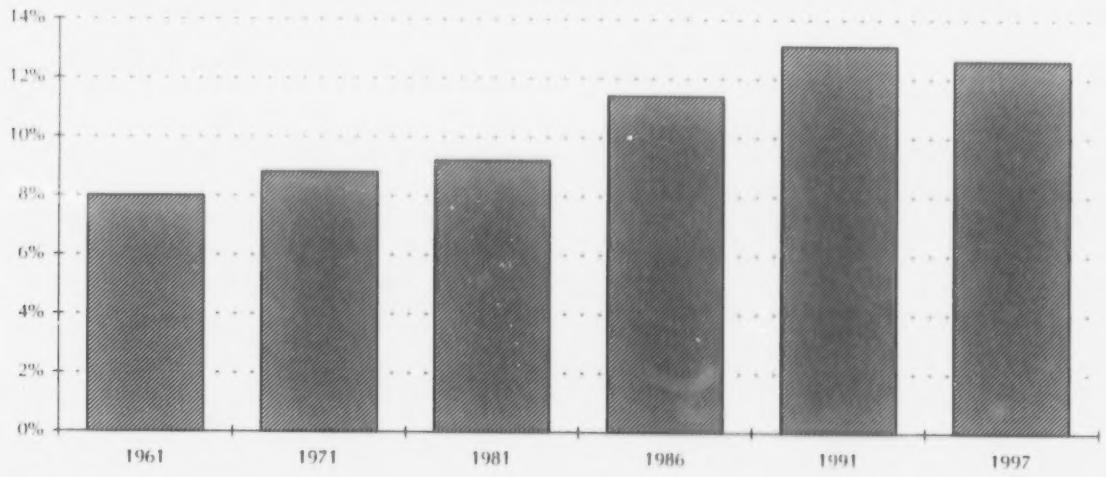
Source: IES/Census of Population 1961/Labour Force Survey, 1999

Figure 2.3: Proportions of part-time employees, 1961 to 2001



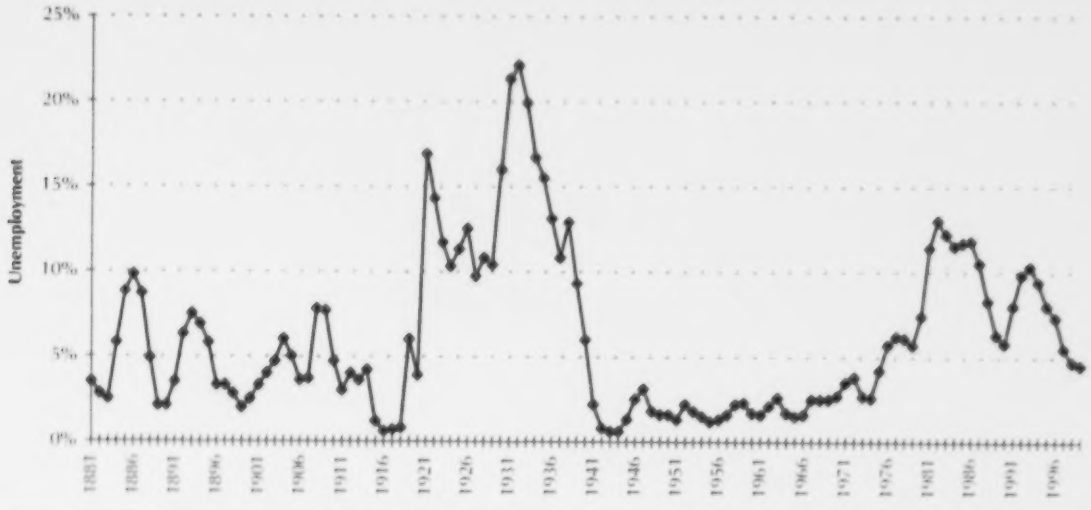
Source: IES/Census of Population/Labour Force Survey/IER

Figure 2.4: Proportion of those employed working in self-employment, 1961 to 1997



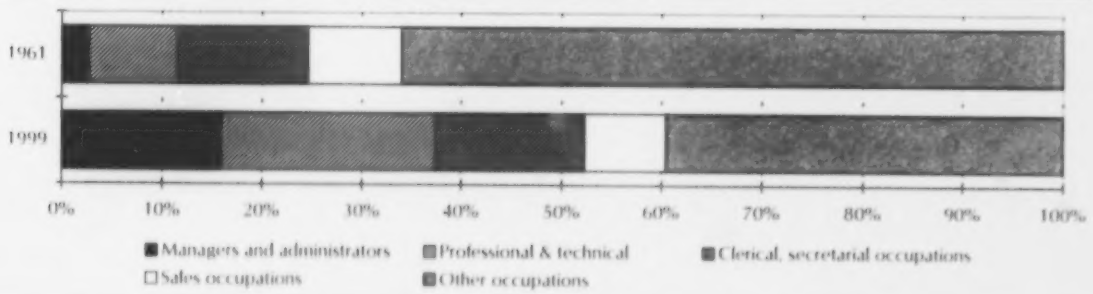
Source: IES/Census of Population/LFS

Figure 2.5: Administrative unemployment in Great Britain, 1881 to 1999



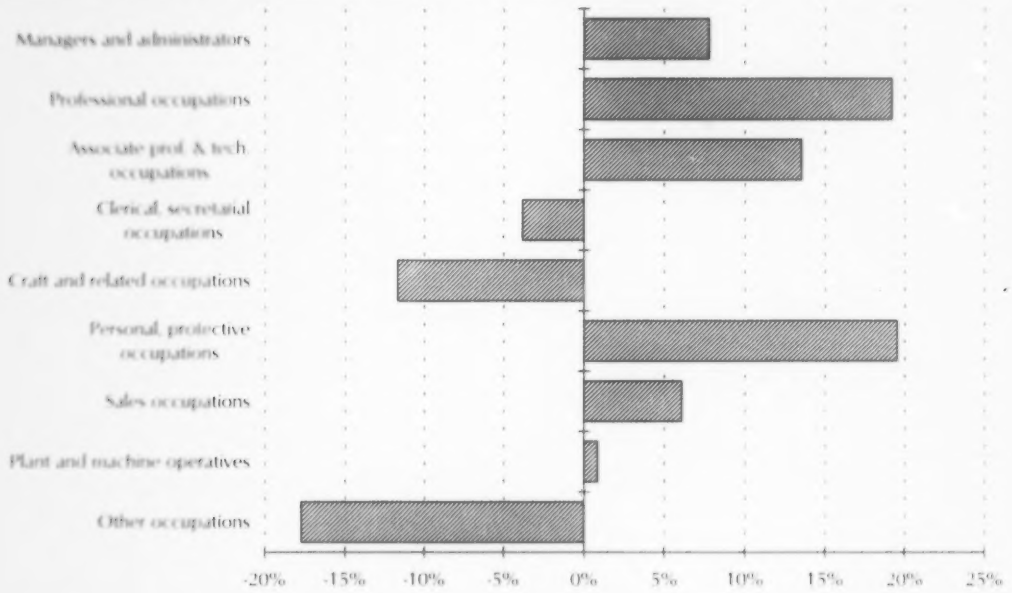
Source: IES/Labour Market Trends (January 1996)/ONS

Figure 2.6: Occupational change, by gender, 1961 to 1999



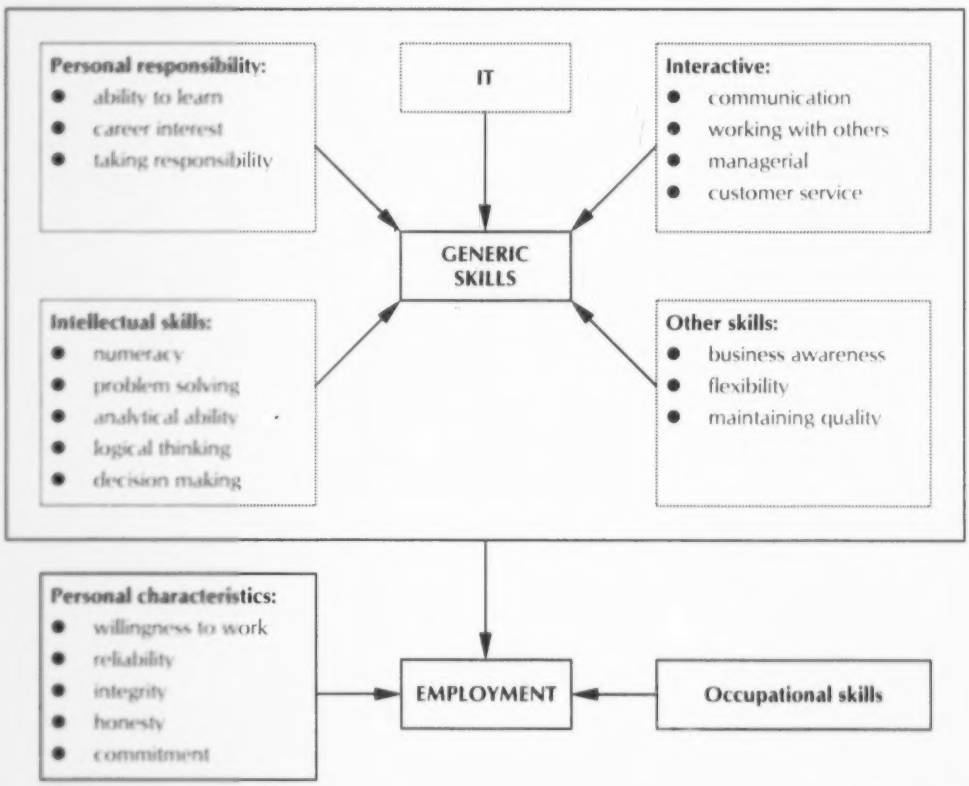
Source: IES/Census 1961/Labour Force Survey 1999

Figure 2.7: Change in employment, 1997 to 2006 (projected)



Source: IES/IER (1999)

Figure 2.8: The breadth of graduate skills in demand



Source: IES

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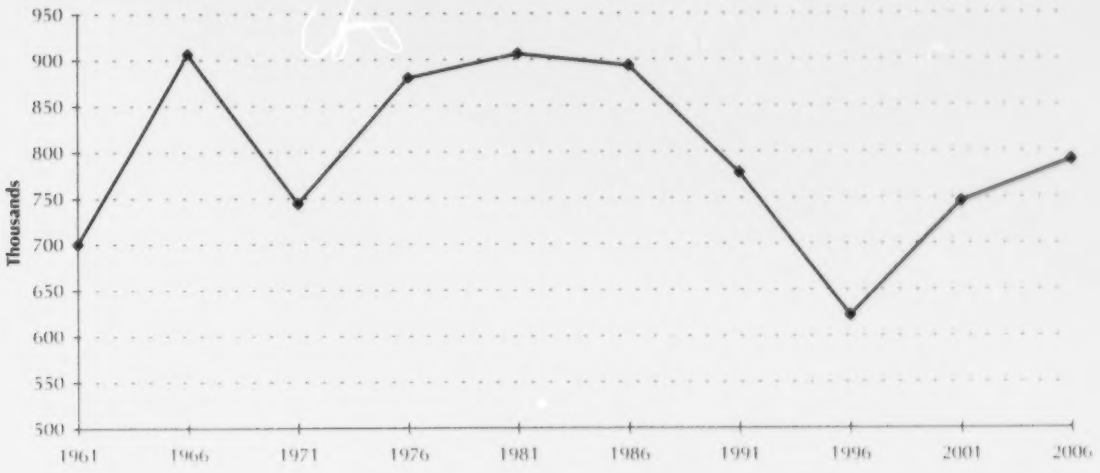
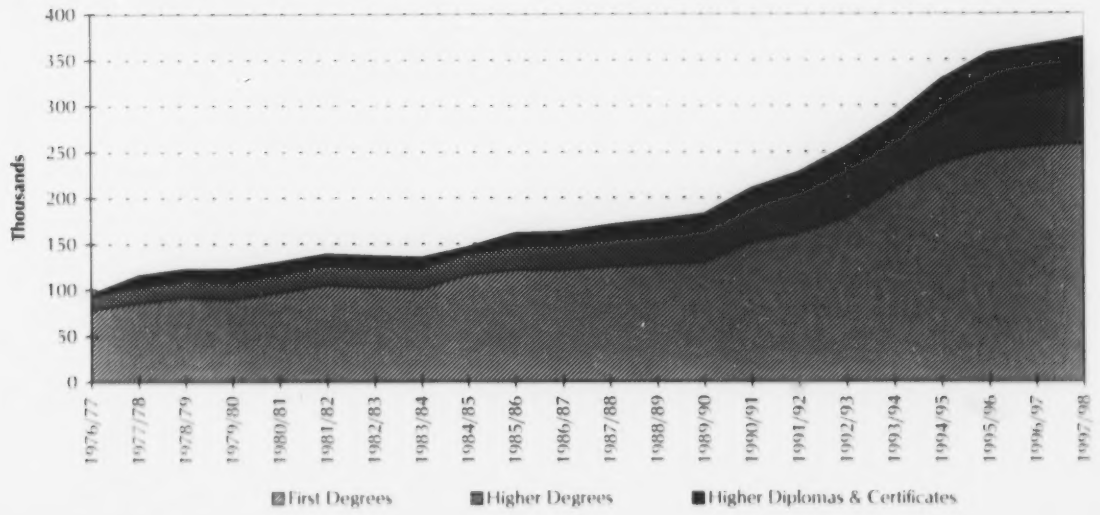
Figure 3.1: 18 year olds, 1961 to 2006



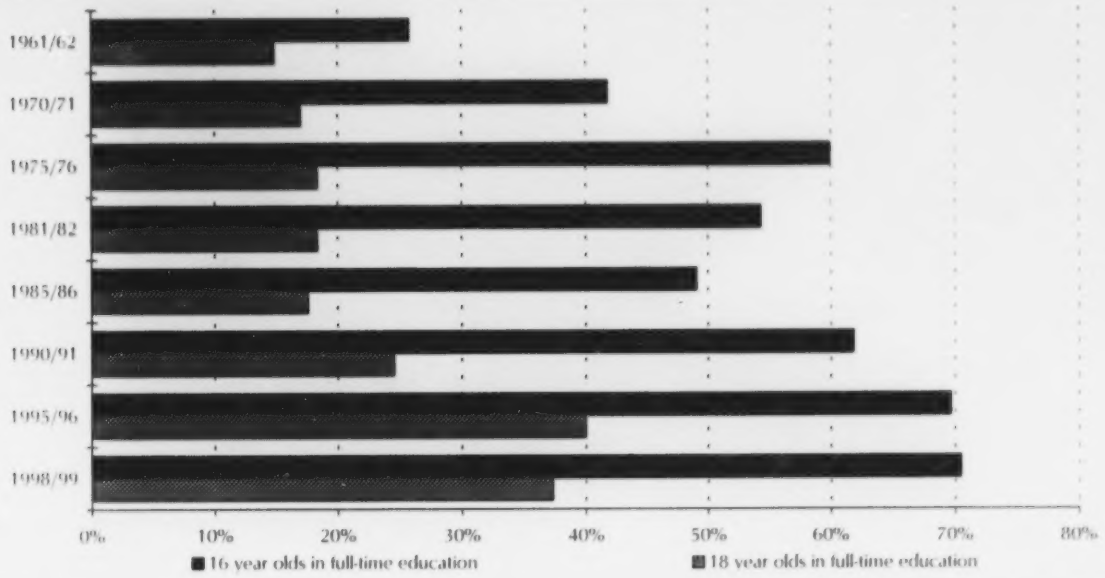
Source: IES

Figure 3.2: Numbers graduating, 1976 to 1998



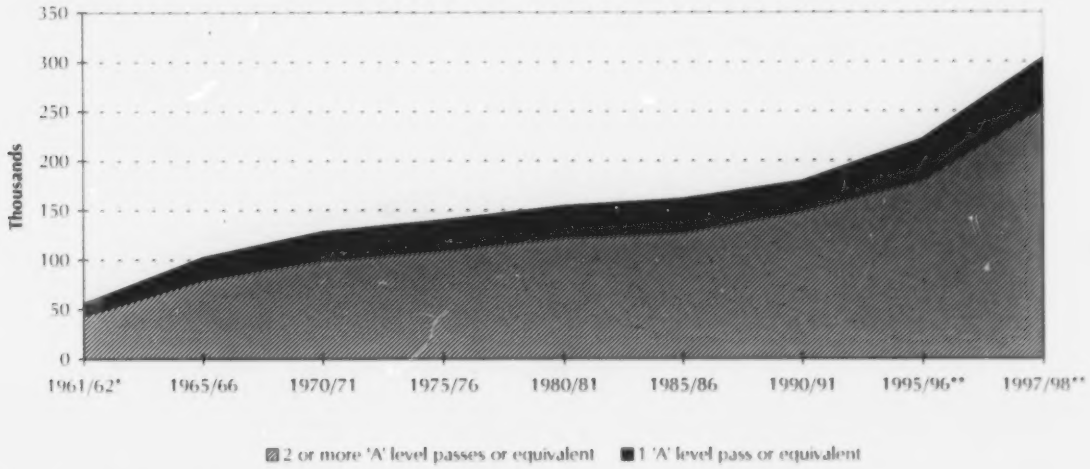
Source: IES/DfEE/HESA

Figure 3.3: Participation in full-time education, 16 and 18 year olds



Source: DfEE (1999b), IES/DfEE/DES various years and tables, Robbins (1963) Appendix 2

Figure 3.4: Numbers of school leavers obtaining 'A' levels[1] or equivalent, UK



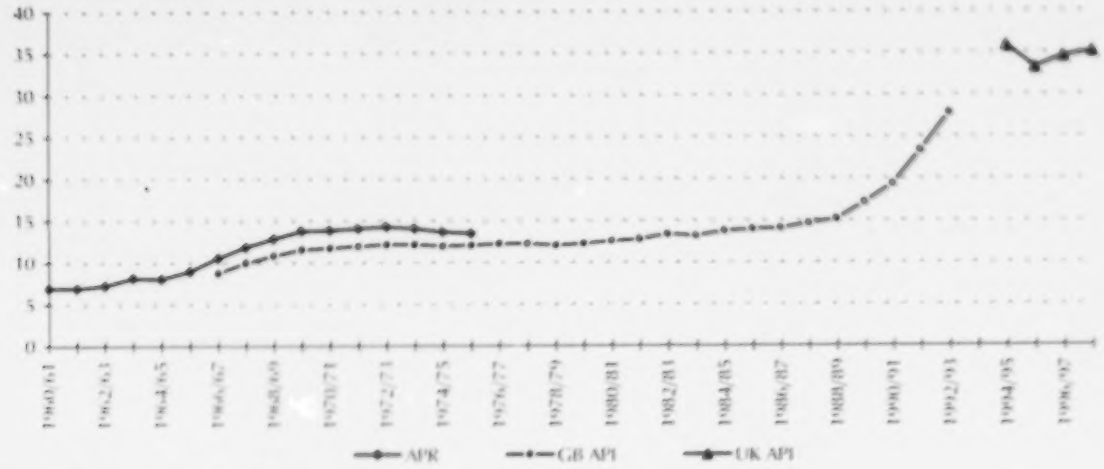
* England and Wales only

** Includes FE colleges

[1] Scottish Highers in Scotland

Source: IES/DfEE/DES various years and tables; Robbins (1963) Appendix 1

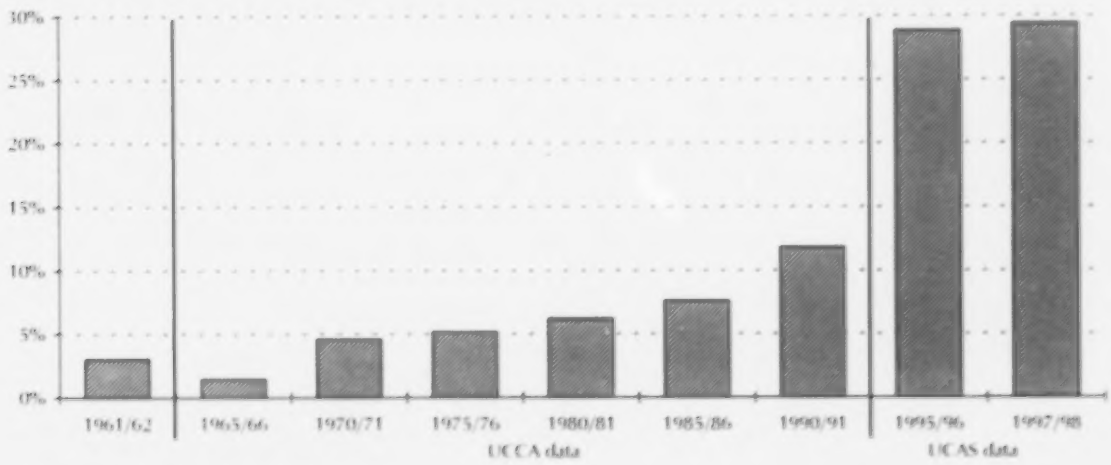
Figure 3.5: Age participation rate*, 1960 to 1998



* This has been calculated in different ways over the years

Source: DES/DfEE/HESA/and Labour Force Survey

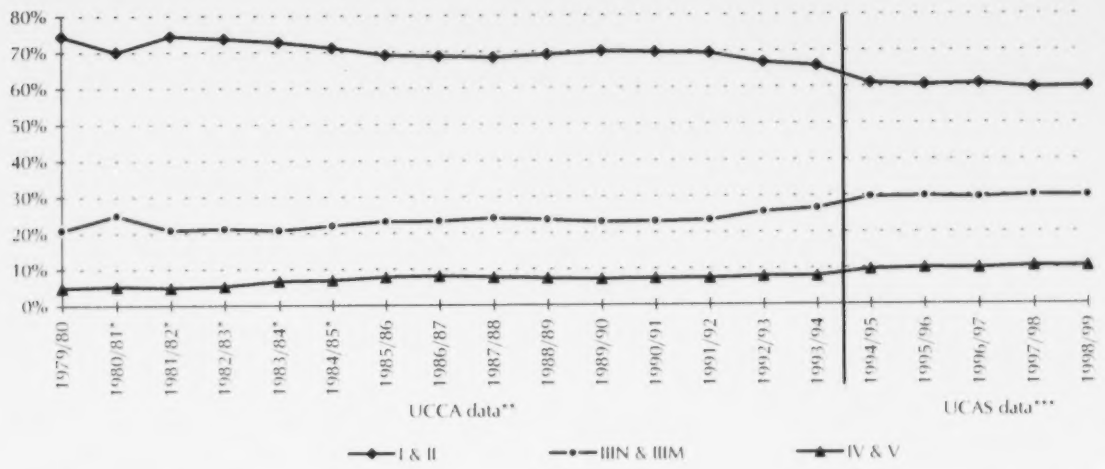
Figure 3.6: Applicants accepted to undergraduate courses with vocational qualifications



1961/62 England and Wales, universities only
1965-91 pre 1992 universities only
1995-98 all HEIs

Source: Robbins (1963), Appendix 1, UCCA and UCAS, various years and tables

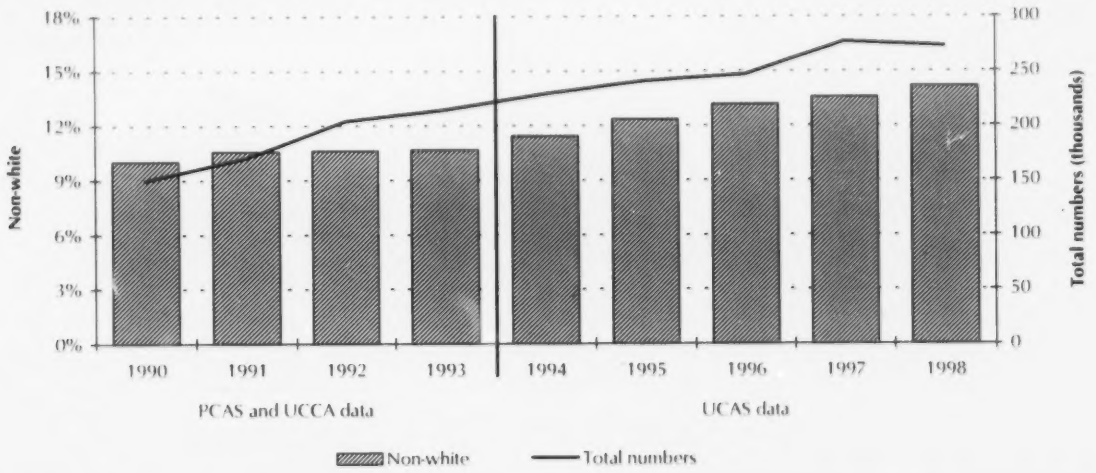
Figure 3.7: Social class of home applicants accepted to degree courses



* GCE applicants only
** Pre-1992 universities only
*** All HEIs

*Source: UCCA** and UCAS*** annual reports and statistical supplements, various years and tables*

Figure 3.8: Non-white, ethnic origin, home applicants accepted to degree courses



Source: PCAS, UCCA and UCAS annual reports and statistical supplements (various years and tables)

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Figure 3.9: The most important factors of importance for deciding where to apply

Student group	Cluster of most important factors offered (in descending order)
Young (under 21 years)	The right subject, overall image, social life, teaching reputation, employment prospects, entry qualifications
Older mature (25 yrs+)	The right subject, attitude to mature students, teaching reputation, academic support facilities, distance from home
Vocationally qualified/access	The right subject, teaching reputation, academic support facilities, employment prospects
Black	The right subject, teaching reputation, academic support facilities, employment prospects, overall image, attitude to ethnic minorities, location, entry qualifications
Asian	The right subject, employment prospects, teaching reputation, entry requirements, academic support facilities, distance from home
Scottish domiciled	The right subject, employment prospects, teaching reputation, image, entry requirements, academic support facilities, location

Source: Connor et al., 1999

Figure 3.10: Improving student choice, by improving information on:

Subject choice; *eg* entry requirements; acceptability for professional qualifications; relevance to postgraduate study, employment and life after graduation

Course structure; *eg* formal teaching, self study, work experience *etc.*

Course quality; *eg* teaching, staff, library *etc.*

The university/college and its **environment**; *eg* location and nearness to home, size, culture, course mix, student mix, type of campus, accommodation available, sport and social facilities, student support, security *etc.*

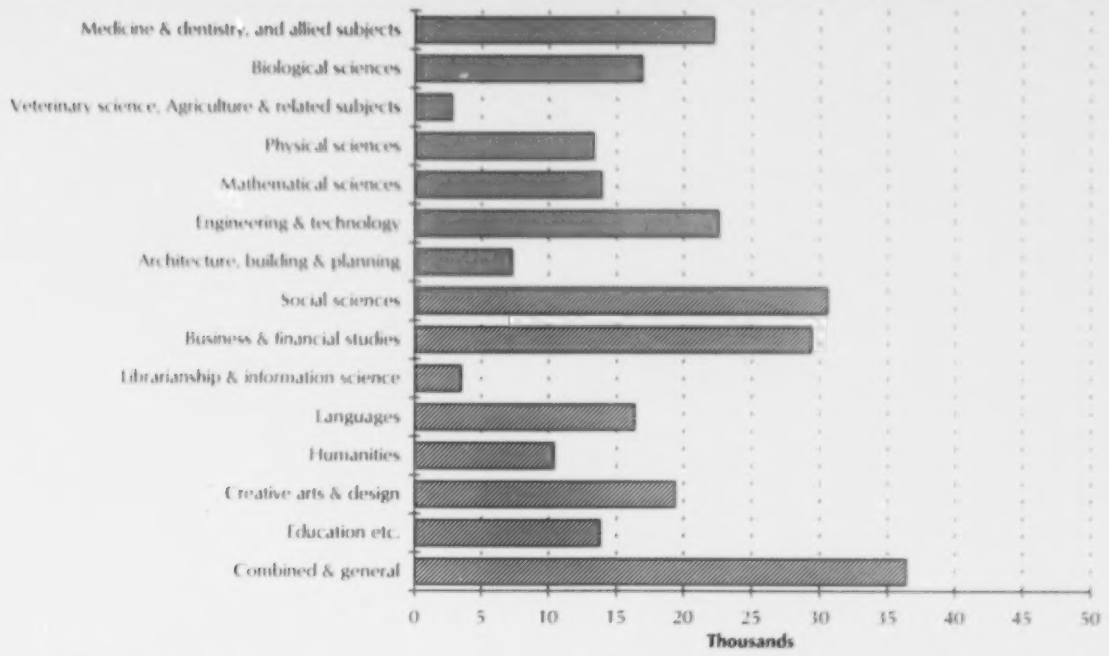
Potential contribution to fees, extra course costs, accommodation and living expenses in different locations

Potential sources of income, including loans, parents, the availability of student employment, and help with budgeting

The longer-term **experiences** of those graduating from different courses, and longer-term employment **prospects** for different types of graduates

Source: IES

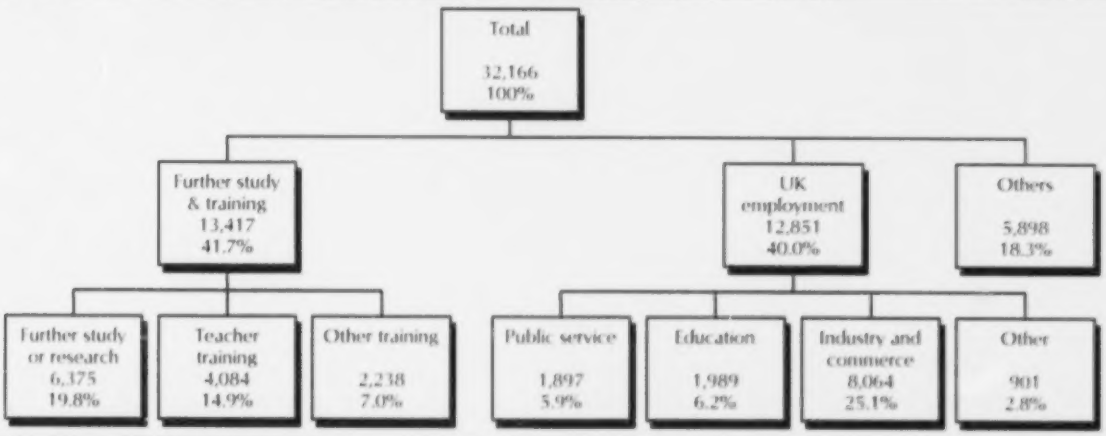
Figure 3.11: First degree output numbers by subject, 1997/98



Total output: 258,800

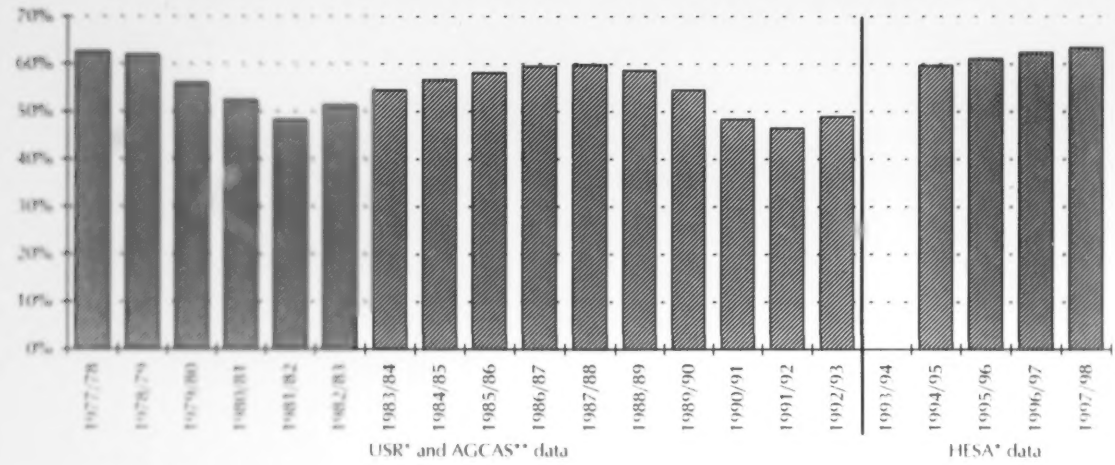
Source: IES/DfEE

Figure 4.1: First destinations of first degree graduates, 1965



Source: IES/University Grants Committee (1967)

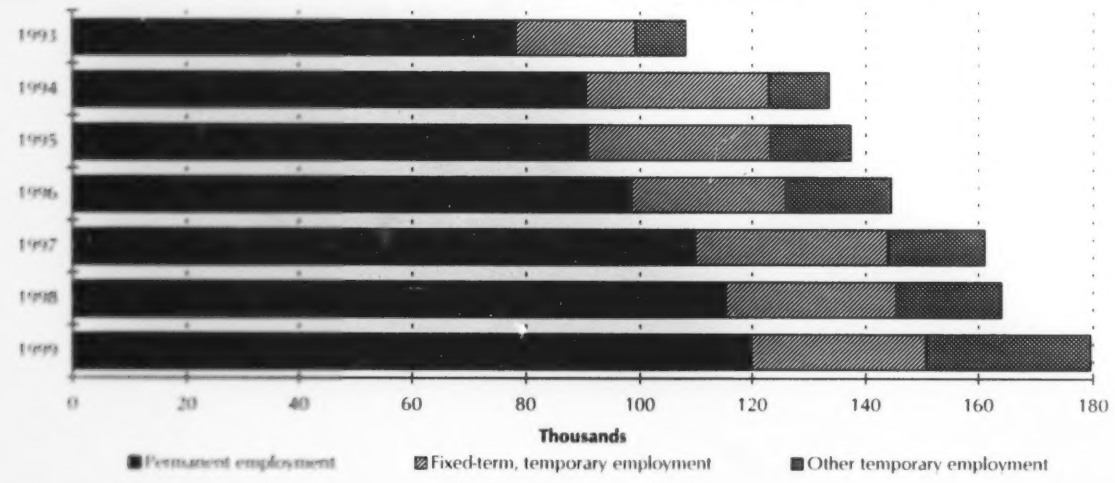
Figure 4.2: Proportions entering employment six months after graduation



* Home students only
** Includes some overseas students

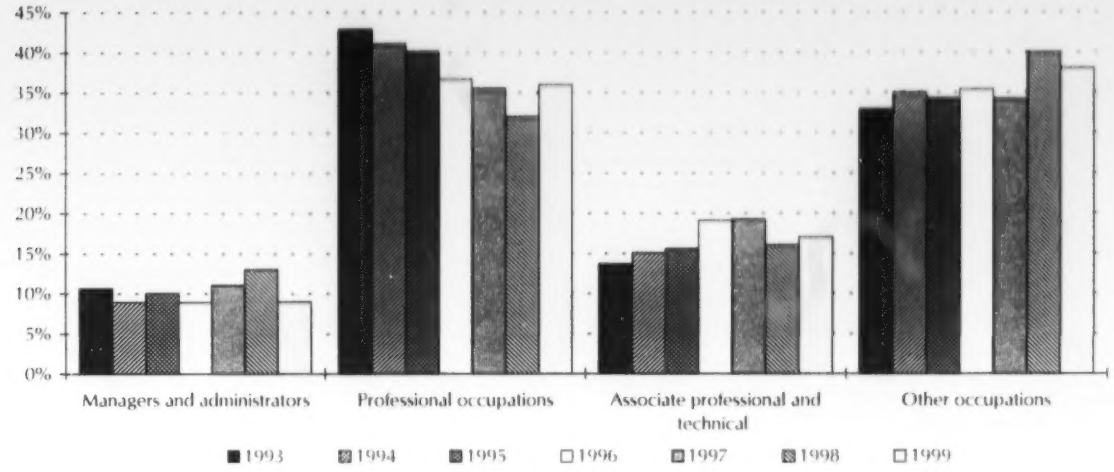
*Source: AGCAS**, USR* and HESA* green book (various years and tables)*

Figure 4.3: Graduates entering employment, by employment status, 1993 to 1999



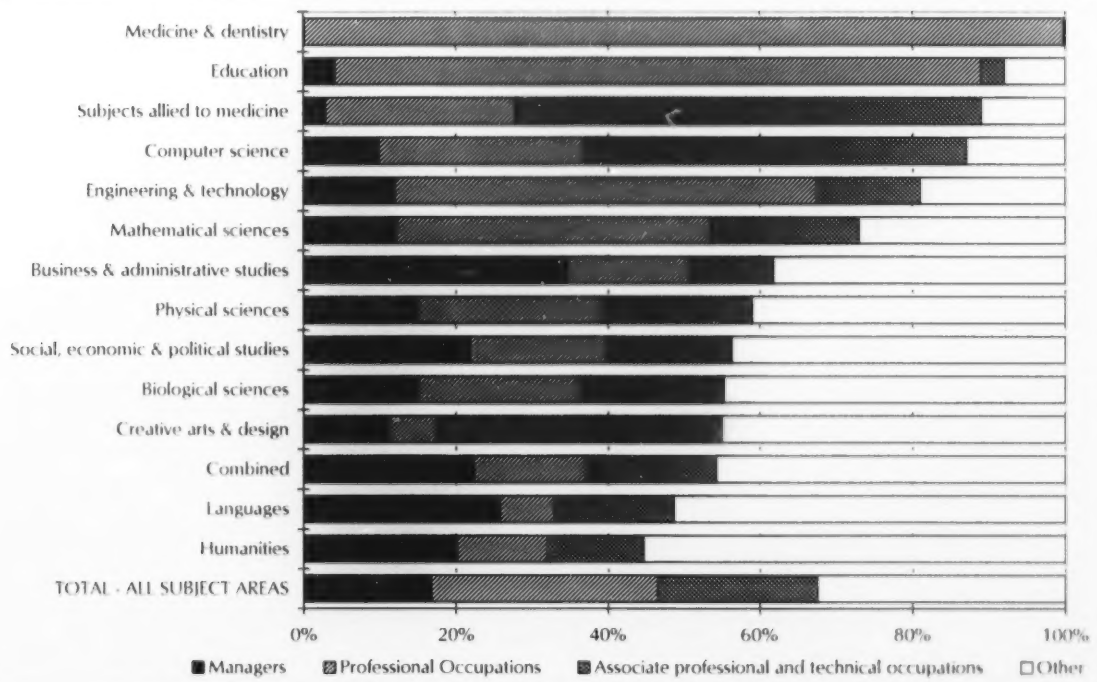
Source: IES/Labour Force Survey (Spring quarters 1993 to 1999)

Figure 4.4: New graduates' occupations, 1993 to 1999



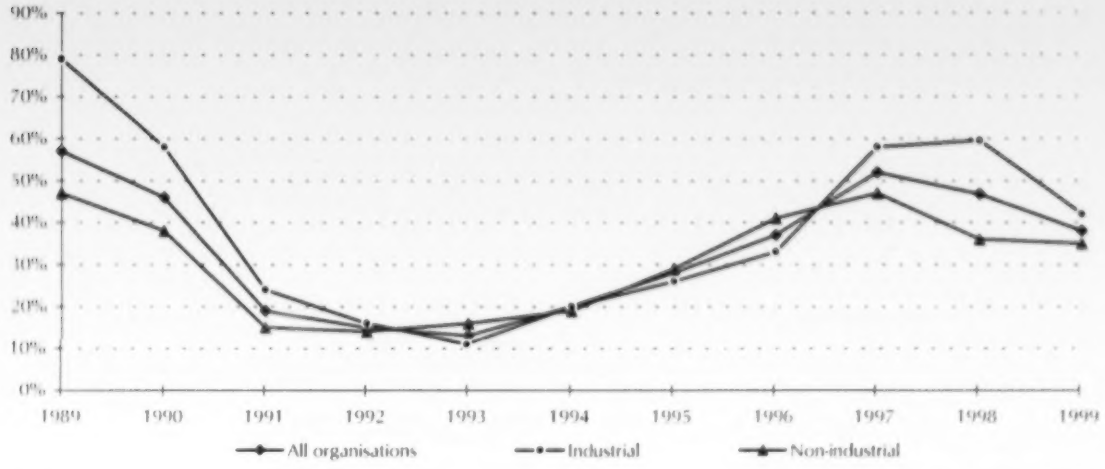
Source: IES/Labour Force Survey (Spring quarters 1993 to 1999)

Figure: 4.5: UK-employed first degree graduates entering graduate jobs, by subject, 1998



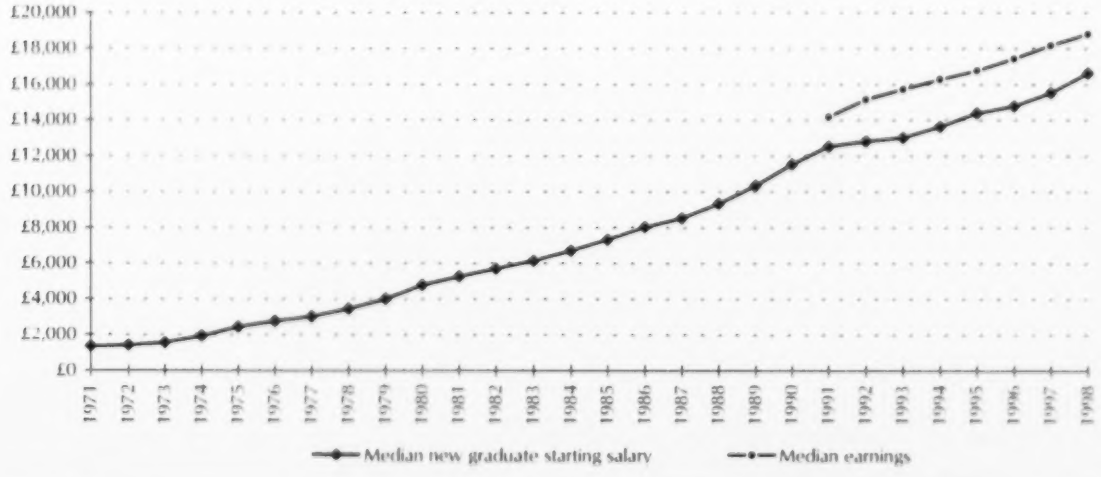
Source: IES/HESA (1999a) Green book, Table 4f

Figure 4.6: Employers experiencing recruitment difficulties



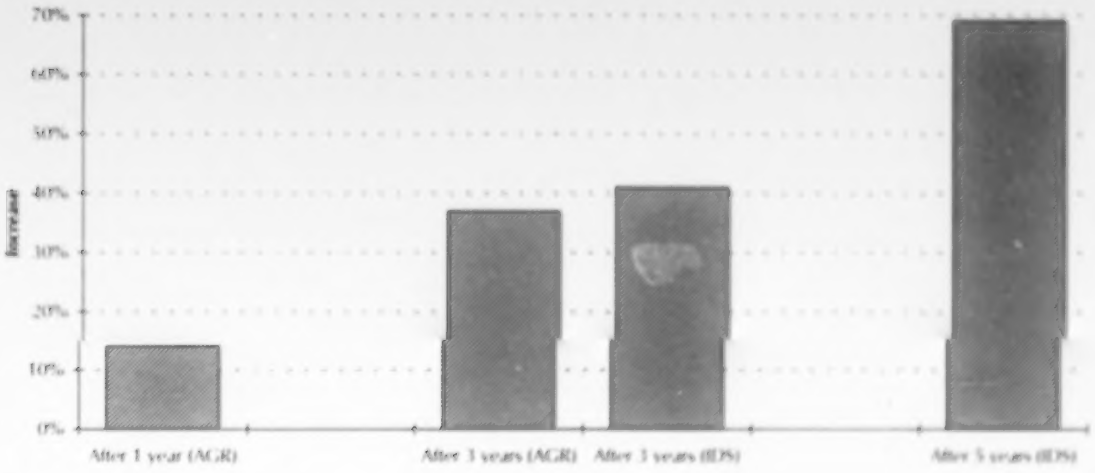
Source: IES/AGR

Figure 4.7: Starting salaries for graduates recruited to the major recruiters



Source: IES/LFS/AGR

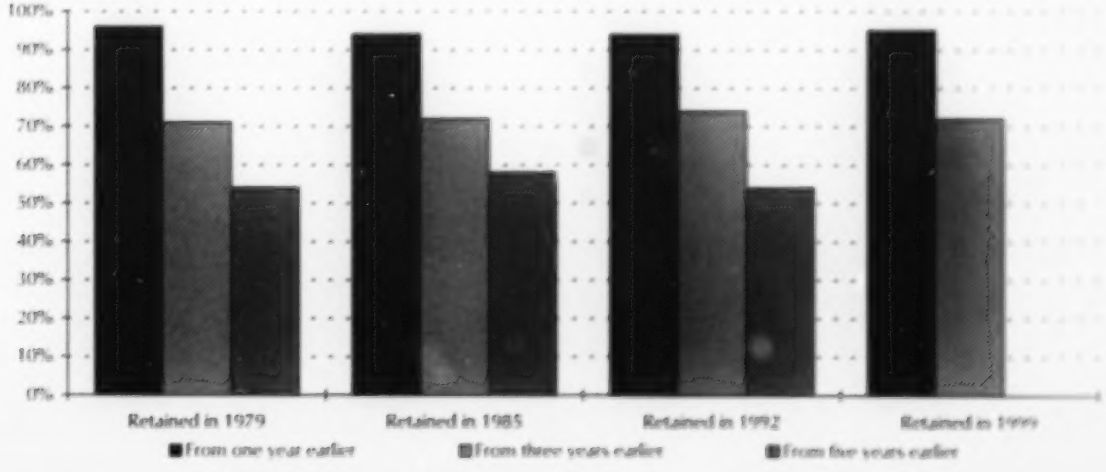
Figure 4.8: Relative salary progression* with the major recruiters



* Compared with current median starting salary for a new graduate
Note: the IDS sample is much smaller than that for AGR

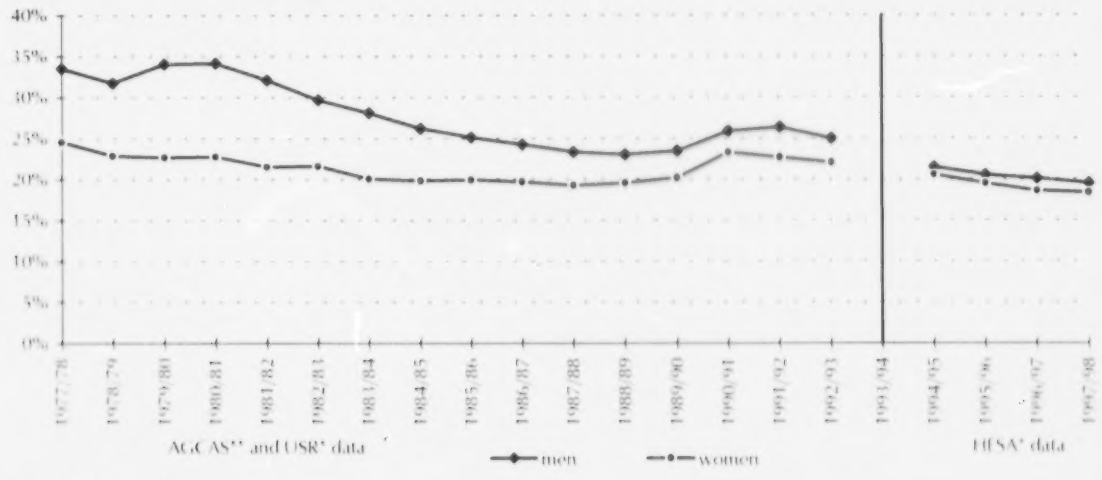
Source: IES/AGR/IDS

Figure 4.9: Graduate retention among the major recruiters, 1970s, 1980s, 1990s



Source: IES/AGR

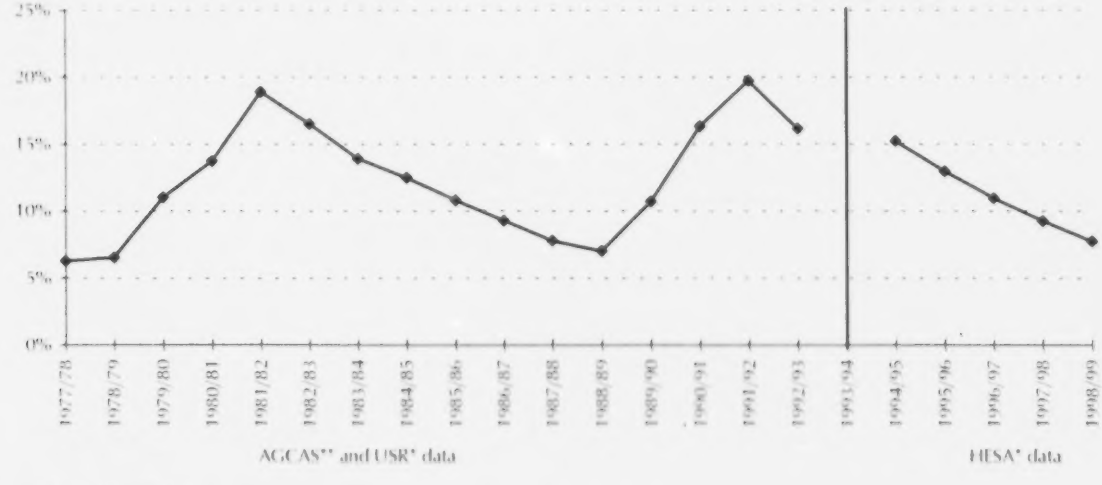
Figure 4.10: First degree graduates entering further study in the UK within six months, per cent of all known destinations



* Home students only
** Includes some overseas students

*Source: IES/AGCAS**, USR* and HESA* green book (various years and tables)*

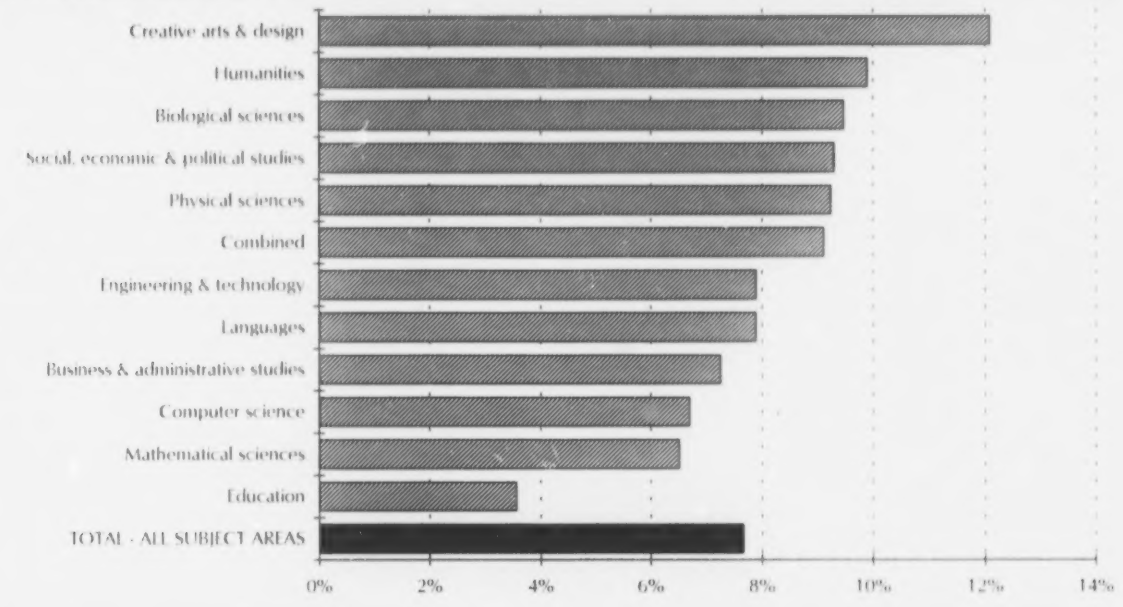
Figure 4.11: Unemployment (ILO definition) six months after a first degree, 1978 to 1999



* Home students only
** Includes some overseas students

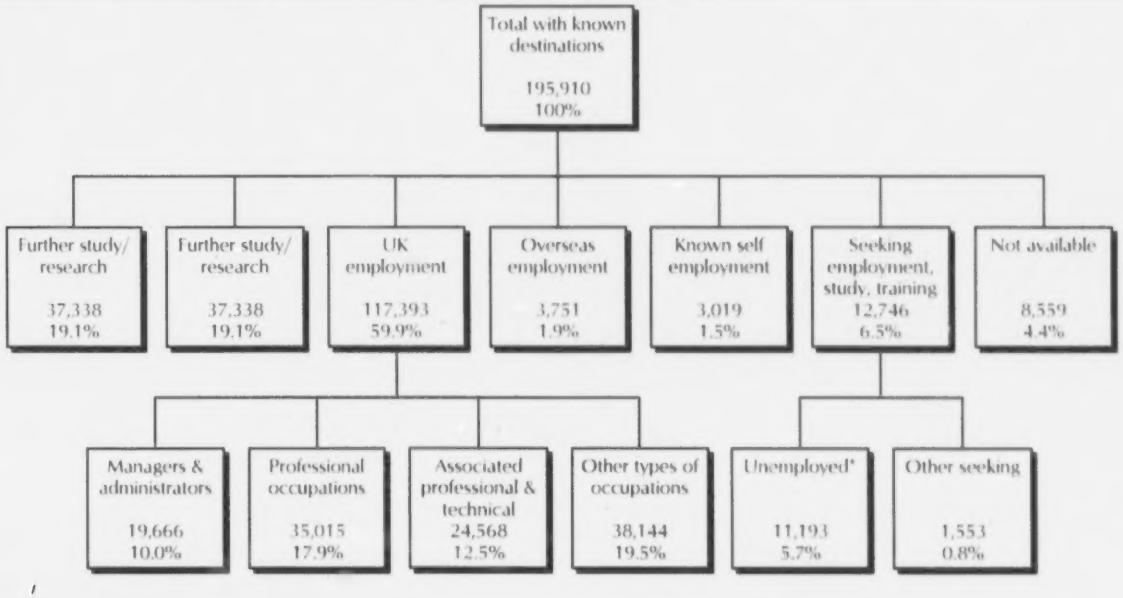
*Source: IES/AGCAS**, USR* and HESA* (various years and tables)*

Figure 4.12: Unemployment (ILO definition) six months after a first degree, 1998



Source: IES/HESA (1999a) green book, Table 2f

Figure 4.13: First destinations of first degree graduates, 1998



* This is not the same as the ILO definition of unemployment used in Figures 4.11 and 4.12

Source: HESA (1999a) Figures 1b and 4f

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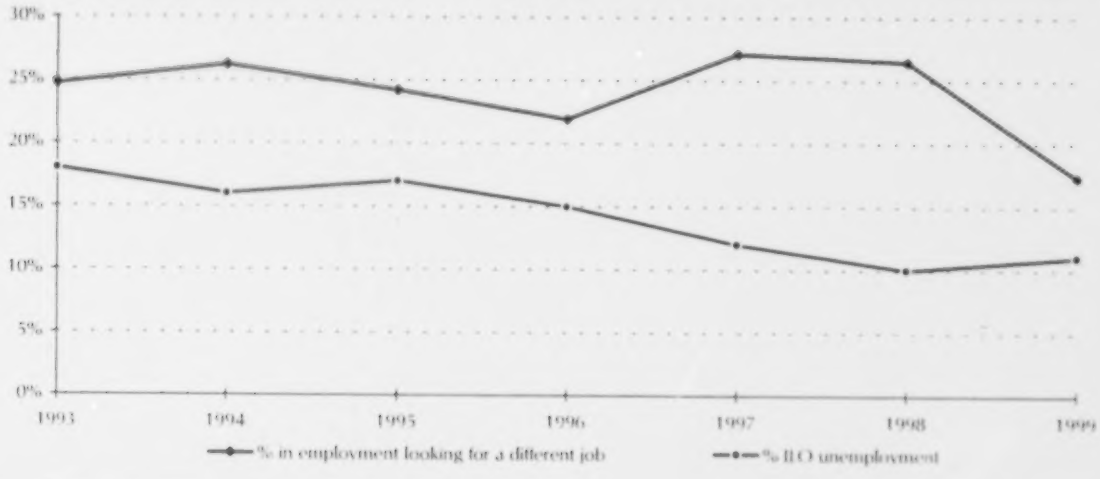
Figure 4.14: Unemployment and Jobsearch among new graduates, 1993 to 1999



Source: IES/Labour Force Survey

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